8 LAYOUT TIPS FROM A MASTER BUILDER

CLASSIC TOY TRAINS

O and S gauge for the operator and collector

Reviewed
RED OAK MARKET FROM MENARDS

LIONEL IN 1947

SETTING THE STAGE FOR GREATNESS

O AND S GAUGE

SEE THREE INSPIRING LAYOUTS

DISCOVER THE ACCESSORY LIONEL NEVER MADE!

17 NEW PRODUCTS

PLUS

A visit to Lionel's postwar showroom

Our name pulls a lot of weight.

BUILT FOR POWER

the

Big Boy

Constructed of metal, the HO 2-Rail DC Big Boy is the largest HO steam locomotive ever built by TRIX.

TRIX HO

Built exclusively for North American 2-Rail DC model railroaders, the limited edition TRIX Big Boy has a scale length of 18-1/2" and weighs over 2 lbs. 12 oz. Representing a class of locomotives only found previously on models of a much higher price, the TRIX Big Boy has a manufacturer's suggested retail price of only $199.99.

The Big Boy features a metal frame, boiler, tender body and tender frame. A high-efficiency can motor with two-stage armature and 5-pole permanent magnet field drives all 12 wheels. Headlight and marker lights are equipped with bulbs for lighting. In addition, the Big Boy has these features:

- 88" (2.2 meter) flanges
- Kadee® coupler #14
- Slots compatible for accessories requiring mounting screws
- Factory-ready for installation of two Sprectrix wireless generators
- Decoder factory-ready for digital sound effects system

Purchased by Marklin in 1964, TRIX manufactures HO products with the same quality workmanship and technical innovation that Marklin has been famous for since 1859.

For more information on the 1996 HO 2-Rail DC Big Boy #21700, visit www.trixtrains.com/bigboy or see your authorized Marklin dealer for the name of your nearest dealer.

Also available are an assortment of freight, tender cars and cabooses. Check www.trixtrains.com/bigboy for details.

www.trixtrains.com/bigboy

MADE IN USA

TRIX®

Marklin

HO

California Zephyr

Coming back. By popular demand.

GE AC6000, HO

Centipede, HO

COMING SOON IN LIMITED SUPPLY. PREORDER TODAY!

www.broadway-limited.com

Reserve today: 888-473-6500

"WOW!"

DASH 9-44CW LOCOMOTIVE

"Large-Scale Model Railroading has never seen a locomotive with 'WOW' factor like the Aristo-Craft Dash-9"

Since the arrival of the first Aristo-Craft Dash 9-44CW Diesel Locomotive models in February, Aristo-Craft customers have been saying the same thing, "WOW!" Aristo-Craft customers are wowed by the detail features and performance of the marvelous Aristo-Craft Dash 9. Be part of the Aristo-Craft "WOW" factor with the Aristo-Craft Dash 9!

See your favorite Aristo-Craft Dealer and be WOW'ed!

WELCOME TO THE NEW WORLD OF LARGE SCALE TRAINS!

ARTISTO-CRAFT TRAINS

RAILBENDER

Virginia Falls Station

$19.95

The perfect complement to Garden Railways magazine

gardenrailways.com

Custom runs coming soon! Order "NOW"!

$49.97 U.S. EACH CAR

CUSTOM MODEL PRODUCTS

RAILMODEL JOURNAL

How YOU can do it BETTER

January 1991 Volume 1, Number 9

Railmodel Journal Staff

Publisher Larry Kuhl
Editor Andrew Sarosdy
Copy Editor Kathy Sarosdy
Regular Contributors
Larry A. Wyatt, Houston
Jim Boyle, Tustin, California, Modeling
Chad Schmidt, Jr., Chattanooga, Modeling
Jack Nelson, Jr., Chattanooga, Modeling
Richard Hendrickson, Jr., Dallas, Texas, Modeling
Tom Daniel, Canadian Modeling
Robert Riggins, Model Locomotives
Doug Eaton, Custom Design, N.H., Layout Design
Rick Wheeler, Electronics

Art Director Rick Johnson
Graphic Design Richard Nelson
Circulation Manager Mona Sarosdy

Contributions Send us your Charles A. Lee, Inc. (1-800-[illegible]). All material must be accompanied by clear photos. We prefer to receive it electronically, but we do manage to work with hard copy. Any publication submitted is subject to full privileges to use, edit, illustrate, in short do to publication at our discretion. Payment will be made within 30 days of publication, unless you have arranged with us for a different time. Please include a SASE if you want your photographs back. Black & white & color, 8 x 10 is fine. Color slides are okay, but we prefer prints. Including text and layout to photographs showing construction techniques, which have the most appeal to us. The art of handling the manuscript and a material shall constitute an acceptance and also the material (1) original and we only use all assignments upon the rights of return.

Reprints from this publication and materials contained in this opinion provided to the magazine are protected by copyright law and cannot be used for any purpose. Write to Larry Sheldon Kuhl Publications, Creative Rail Photo and the magazine should publish photographers and to reproduce this work and liability (1) permission to edit material we assume every learning to be correct to using any of the material published in this magazine.

Advertising Information: Editor Andrew Sarosdy [illegible] Tel. [illegible]

Advertising Policy: Railmodel Journal will accept advertising only that manufactures, publishes about, supplies, publishes and distributes the best products. We require no discount and other advertising — no discount ads of any kind — and we do not. Publisher reserves the right to reject, cancel, and publish information at complete will.

Entire [illegible] is published [illegible] by publication [illegible] Larry Kuhl Publications, Inc., Tel. [illegible]. Office: [illegible]. Subscription rates: [illegible] Single copy [illegible] Back issues [illegible] Foreign subscriptions [illegible] Canada and other countries. Foreign subscriptions [illegible] Tel. [illegible]. Entire [illegible] Copyright [illegible] by Larry Kuhl Publications, Inc. All rights reserved. Nothing from this publication may be reproduced in any form without the written permission of the publisher. Printed in the U.S.A. [illegible] Publication [illegible] Postage paid at [illegible] POSTMASTER: Send address changes to: [illegible]

Table of Contents: "The Journal"

All Scales — All Scales

Techniques for interior and motor modeling
[illegible] "Log Cars" — 10
Reviewing "Open Cars" — Box Cars — 24
Designing an Interior: From Plans to Work Up — 46
Weathering an Engine — Brass Wheelsets and Trucks — 60
Painting Plastic Parts Paint or Plastic — 70

Operations
How Log Cars Log Everything Moves — 14

Plans
[illegible] Work Lady, Passenger Station — 40
[illegible] — 74

HO Scale — HO Scale

Freight Cars
[illegible] — 4
[illegible] — 16
[illegible] — 30
[illegible] — 32
[illegible] — 36
[illegible] — 1
[illegible] — 8
[illegible] — 24

Locomotives & Trains, Techniques
[illegible] — 12
[illegible] — 28
[illegible] — 34
[illegible] — 44

N Scale — N Scale

Freight Cars
[illegible] — 18
[illegible] — 8

Locomotives & Trains, Techniques
[illegible] — 50

O Scale — O Scale

[illegible] — 42

Locomotives & Trains, Techniques
[illegible] — 52

G Scale — G Scale

Locomotives & Trains, Techniques
[illegible] — 22
[illegible] — 22

Departments — Departments

[illegible] — 2, 22, 57, 72
[illegible] — 6

On the Cover: [illegible] cover artwork [illegible] shows [illegible] and [illegible] [illegible] [illegible]

Growing your club

As we prepared to republish the membership roster of your club while at the same time promoting interest in garden railroading? One way of doing this would be to stage an event.

The event should have a theme—something like "Learn about garden railroading" perhaps. This could be done in a mall or perhaps in a public park or community center. Tables staffed with active club members could offer photo galleries of local garden railways. Video tables might feature people building or rebuilding models, an exhibit of garden railway plants, and a display of model structures. If this format was conducive to it, you could have many live-layout demos that highlighted different aspects of the hobby. Such an event you'll want some kinds of and subscribers. The idea is to both promote your club and the hobby in a positive, open and inviting way.

There are many ways to organize; below are several potential groups from which you could choose, as follows:

- A sign-in sheet for those who already know about your club and be welcomed.
- A sign-in sheet for those who want a bunch of your club.
- A smaller scale exhibit(s) who might become interested in large scale.
- The general public—to us should welcome.

The biggest problem is how to reach these diverse groups. There is other marketing and it is at this that most organizations fail. If you don't get the word out effectively, there's little chance of success.

There are several possible options to consider. Many of these are free but some to personal consideration.

Use the word on and about of town and do a reasonable of you can if money should local clubs. Ask them to include your event in their newsletter or e-mail letter to club members, perhaps the use to them possible in advance of the date. Make up and designate those days briefly describe the event and give contact for further information. Ask local hobby shops to prominently post flyers in their areas. Were grocery stores have public bulletin boards, too—use them.

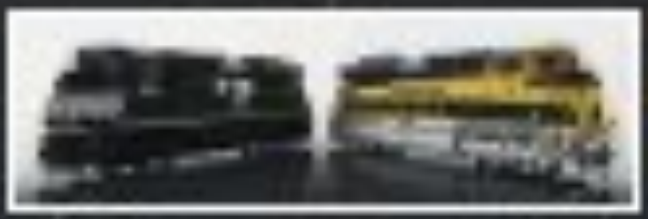
Newspapers (and especially the weekly community papers) love "What's happening" columns. They are hungry for information about events like yours. Websites like Craigslist can also help. You'll want to create separate posts as the listings don't get buried with time.

Another thing to consider is having a proper registration with a control registration fee—say $5 for adults, and kids under 16 free when accompanied by an adult. Use attendees to fill out a registration form that includes contact information, even if it is only an e-mail address. This not only gives you available numbers, it can use a list of the still-will.

Potential new members must be made to feel welcome, and welcomed that you are genuinely glad that they have come. Introduce all regulars that promote the hobby and invite registration sheets over that purpose. Visit it to clearly address what begin with it and how garden railroading differs from indoor modeling, that could be good, too. Then follow up the event with a mail newsletter to registrants about club meetings.

By now you just a few ideas to self-promote a lot of work by club members, and maybe more expense, but the benefits to your club could be both great and long-lasting.

GENESIS



Whoever Said "Don't Sweat the Details" Never Owned an SD70ACe.

[illegible]

[illegible]

[illegible]

[illegible]

Don't forget to start thinking about the holidays. [illegible]

HORIZON

[illegible]

NEWS & PRODUCTS

HO scale Electro-Motive Division GP9/GP9B and GP18/GP18B models: Athearn is offering these Ready to Roll locomotives decorated for BNSF Ry. Heritage II in one number or Heritage I on GP9/GP18, Heritage I in two numbers or Heritage III in one number on GP18B. Features include Athearn Trains, Tracks & Trains Inc. and Wauna (GP9/GP18 only in one number). The models are offered in three numbers per reference online retail. The road units (GP9/GP18 each) feature sequential applied grab irons and new through fans. Athearn Trains, (310) 763-7140, www.athearn.com

HO scale locomotives

• ALCO T electric locomotive. This is a metal paint scheme Great Northern, Lackawanna, Milwaukee Road, Pennsylvania, and Reading Co. Two road numbers each. Five road numbers available as delivered in Acela and NJ Transit. Road numbers each. Upcoming production models include: Phase I and II diesel locomotives, Phase I and II passenger cars, Phase I and II freight cars, Phase I and II accessories, Phase I and II electric locomotives, Phase I and II steam locomotives, Phase I and II trolleys, Phase I and II vintage trains, Phase I and II wood cabooses, Phase I and II wood freight cars, Phase I and II wood passenger cars, Phase I and II wood trolleys, Phase I and II wood vintage trains, Phase I and II wood wood cabooses, Phase I and II wood wood freight cars, Phase I and II wood wood passenger cars, Phase I and II wood wood trolleys, Phase I and II wood wood vintage trains, Phase I and II wood wood wood cabooses, Phase I and II wood wood wood freight cars, Phase I and II wood wood wood passenger cars, Phase I and II wood wood wood trolleys, Phase I and II wood wood wood vintage trains, Phase I and II wood wood wood wood cabooses, Phase I and II wood wood wood wood freight cars, Phase I and II wood wood wood wood passenger cars, Phase I and II wood wood wood wood trolleys, Phase I and II wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood trolleys, Phase I and II wood wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood wood trolleys, Phase I and II wood wood wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood wood wood trolleys, Phase I and II wood wood wood wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood wood wood wood trolleys, Phase I and II wood wood wood wood wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood wood wood wood wood trolleys, Phase I and II wood wood wood wood wood wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood wood wood wood wood wood trolleys, Phase I and II wood wood wood wood wood wood wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood wood wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood wood wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood trolleys, Phase I and II wood wood wood wood wood wood wood wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood trolleys, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood trolleys, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood trolleys, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood trolleys, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood trolleys, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood trolleys, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood trolleys, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood trolleys, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood trolleys, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood trolleys, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood trolleys, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood trolleys, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood vintage trains, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood cabooses, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood freight cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood passenger cars, Phase I and II wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood wood trolleys, Phase I and II wood

>> Module Updates

Scan the code to access Model Railroader's website for weekly News & Products updates.

HO scale freight cars

+ Trinity Rail 3,281-cubic-foot-capacity two-bay covered hopper. Chicago Freight Car Leasing Co.'s 4,339 cars are numbered, Midwest Hollow Corp., Trinity Industries Leasing Co., Union Pacific 4,344-cubic-foot-capacity cars. Consists are timed for specific numbers and ordered sorted. Molded resin covering bearing and crossover platforms, wire grab irons, and scale Barber stuff couplers without cup pins. Add-On Code 5816. Ready-to-run. Assembled and painted models, $45.98; kits, $34.98. www.accurail.com/shop/modelrr.com/

+ 100-ton hoppers. American Electric Power Service Corporation Railroad (black or brown). Consist 4 varied reporting marks at New York Central scales, each with a different "Coronet Quality" handrail, footrail, & brakewheel. Each of both sets includes an Ajax (Ajax) coupler, Accurail 2011 Roads in use. Available Coal. Boxcar, $19.98/2978. www.bowser-trains.com

HO scale structures

+ BOY restaurant. Laser-cutted acrylic kit with clear acrylic window glazing, vinyl sign, self-adhesive logo signs, and posters. Finished and 7" x 4.5" x 4.5". Summer Line, $55 side $40. www.walthers.com

+ Dexter's Bike Shop. Injection-molded plastic kit with assembled metal and various details, antennas, etc.

+ Trinity Rail 3,281-cubic-foot-capacity two-bay covered hoppers. Chicago Freight Car Leasing Co.'s 4,339 cars are numbered, Midwest Hollow Corp., Trinity Industries Leasing Co., Union Pacific 4,344-capacity cars. Consists are timed for specific numbers and ordered sorted. Molded resin covering bearing and crossover platforms, wire grab irons, and scale Barber stuff couplers without cup pins. Add-On Code 5816. Ready-to-run. Assembled and painted models, $45.98; kits, $34.98. www.accurail.com/shop/modelrr.com/

+ 100-ton hoppers. American Electric Power Service Corporation Railroad (black or brown). Consist 4 varied reporting marks at New York Central scales, each with a different "Coronet Quality" handrail, footrail, & brakewheel. Each of both sets includes an Ajax (Ajax) coupler, Accurail 2011 Roads in use. Available Coal. Boxcar, $19.98/2978. www.bowser-trains.com

+ BOY restaurant. Laser-cutted acrylic kit with clear acrylic window glazing, vinyl sign, self-adhesive logo signs, and posters. Finished and 7" x 4.5" x 4.5". Summer Line, $55 side $40. www.walthers.com

+ Dexter's Bike Shop. Injection-molded plastic kit with assembled metal and various details, antennas, etc. Any

HO scale freight cars. **The latest freight cars from Micro Trains include a Union Pacific 40-foot 6-inch-wide-door steel boxcar, $32.75 each; Montana Rail Link 50-foot boxcar with exterior posts, $34.95; Atlantic Coast Line 52-foot 6-inch riveted-side express reefer, $35.50; and Burlington Northern 50-foot covered gondola, $27.95. The ready-to-run models have injection-molded plastic bodies with plastic wheelsets and Magne-Matic couplers. Micro-Trains Line Co., 541-926-3765, www.micro-trains.com**

+ Electro-Motive Division SD60 and SD60M diesel locomotives. New paint schemes: AT&SF (Canadian National, Electro-Motive Division livery, Unit 5) Locomotive Group two numbers and two (two-tone numbers) shades; BNSF by (Heritage III), Canadian Pacific (four numbers), and CSX. Many numbers and colors noted. Decoupled lighting, separate cam, short and modernized hatch and locomotive couplers. Direct-current models, $129.95; add $8.5 sound, available BNSF. Second quarter 2011. Ready-to-run. Walthers Cornerstone Model Railroad Co., 800-487-2888, www.athearn.com

+ General Electric GE44AC diesel locomotive. Union Pacific, BNSF (B), Grand (GM) scheme), Canadian Pacific

Canadian Pacific, and CSX (dark blue and yellow). Two road numbers per paint scheme. Five path scales with dual-mode dynamics, illuminated dual lights, and Tsunami sound scales. Compatible with Digital Command Control decoder. $129. Ready-to-run, Kato USA Inc., 847-781-0666, www.katousa.com

N scale freight cars

+ Pullman-Standard 50-foot 9,260-cubic-foot-capacity boxcar. Four-pack containers, four-a-stand with Western Maryland (Railway) reefer repairing weather and Wisconsin Central. Six numbers. Add-On Code 108 and Milwaukee Road

SLOW TRAIN COMING?
IT MUST HAVE TCS BEMF
World leading AUTO ADJUSTING BEMF, standard on every TCS decoder.
TCS
WOWSound

Micro Mark
THE source for unique, hard-to-find tools and model building supplies at low prices
15% OFF Any Order!
OVER 3,000 ITEMS IN OUR CATALOG AND WEB SITE!
FREE Catalog

Timber cobbling sets. These easy-to-cut peel-and-stick walls are the latest offering from Chooch Enterprises. The timber cobbling walls are offered in scale N and HO scales; medium (HO), and large (HO and O). The walls sold in 9¼" x 12" sheets. Add for $10.99. Chooch Enterprises, 408-270-9764, www.chooch-enterprises.com.

Steel road numbers are great when hauling lumber and bulk material cargoes. MDR Roads to use. Blue Valley Models, 84", See their www.bluevalleymodels.com.

n 36'-40' gondolas. Atlantic & Western Canadian National railroads rebuilt and Wisconsin Central operating roofs, long road numbers and 4 through hooks. Four at least detail kit. Fadens, Minnesota & Fadens, Florida East Coast Consignment Kit. Contact Wisconsin Central Ltd., Wisconsin Central, and Milwaukee Road. An excellent model railroad, detailed plastic body with die cast metal underframe body mounted trucks, couplers and detail parts, trucks, letters, and many more. Kits for Each. $40. Ready-to-run. Tichenor Inc., 978-470-8181. www.tichenor.com.

N scale structures

n Undercoat modular electric turntables. Features kind of engine crack versions. Tracks can be added

Authentic AMERICAN
HO SCALE
83
RAILROAD

TRAIN FEST
OOOPS!
So are Jo Anman, the Aargire isn't company policy!

Make Your Dream Layout a Reality!
Museum Quality
Custom Model Railroad Builders

FLORIDA'S LARGEST
TRAIN STORE
H&R TRAINS

NICHOLAS SMITH TRAINS

Model Railroading The Old Fashioned Way

VISIT OUR WEBSITE OR GIVE US A CALL

www.nicholassmithtrains.com

NEWS & PRODUCTS

Club offerings

› Ocala Midland HO 40-foot 6-31 steel-roof double-door boxcar. Reboxx (PO Box 6) is custom-decorated for the Ocala Model Railroaders Historic Preservation Society Inc. Three road numbers (the car 321 was 1961 or Dec. 1941 Shipping is $5 for one car, $7 for two, or $9 for three. Send check or money order (payable to OMRR) to Ocala Model Railroaders Historic Preservation Society Inc., P.O. Box 6373, Ocala, FL 34478-6373; www.ocalamodelrailroaders.com

› Providence & Northern 20th anniversary 40-foot steel boxcar. Accurail (PO Box 69, Kewaskum, WI 53040; www.accurail.com) is custom-decorated for the Providence & Northern Model Railroad Club. Two road numbers available. $39 each plus $4.75 shipping (some restrictions apply). Rhode Island residents add 7 percent sales tax. Mail checks (payable to Providence & Northern Model Railroad Club, c/o Jim Kilpatrick, 5 Vine Street, Warwick, RI 02889; www.pandnrr.com).

wireless voice wiring or soldering. ESU Electronics (each with onboard sound, power and control circuits, and power distribution control board) available separately. Zimo LV101 Inc., 847-741-5700; www.tamsmfg.com

O scale locomotives

› Electro-Motive Division 6-axle diesel locomotives. Two-piece cab/hood, 7000 Atlantic & Pacific / Canadian National, and Rock Island 1001; Indiana Harbor Belt and Northern & Pennsylvania 1000; Reading 5, and Rutland 1000 (Delaware edition). Two road numbers per paint scheme. Sound decoder. Six can stand-mount, road

RIO GRANDE SOUTHERN RAILROAD HOBBIES

GARDEN TRAIN SUPPLY

Coming Soon

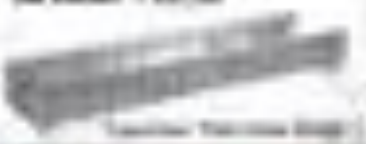
Make your hobby to the great outdoors!
Subscribe to *Garden Railways* today.
Go to **www.GardenRailways.com**

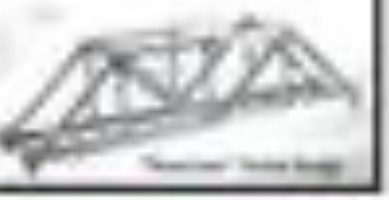
TRAIN STORE

BECAUSE IT IS!

M&R TRAINS

DVD or VHS TAPE





Welcome to Canada

Open 9:00AM to 5:30PM PST
7 Days a week

Phone: 1-888-731-5065 Web: www.artknapptrains.com

Tortoise
The BEST!
Slow Motion Switch Machine
MADE IN THE USA
$31.95

Turn your PC into a Centralized Traffic Control facility!

READY TO ROLL
RTR
Florida

NEW!
SoundTraxx Brings You Sound for the Rest of your Train.
SOUNDTRAXX

NEWS & PRODUCTS

Rare paint schemes on Sn3 Classic Metal Works vehicle vehicle Rail Chief and Western Ruby. The delivery truck, priced at $18.75, has a separately applied side vent. vision. CMW Holdings Ltd./Classic Metal Works, 419-843-8114, www.classicmetalworks.com

S scale structures

J. Frank's Grocery. Factory assembled and weathered to resemble old loading dock and adds large display windows, awnings, trailer, rear light, working front exterior lighting, printed shelves, and window treatments. Scenic Rock & Rock Creations, Woodland Scenics, 973-940-5910, www.woodlandscenics.com.

Z scale locomotives

Electro-Motive Division SD70M diesel locomotive. Athearn, Trains, N Scale, It's time to start building a Z scale layout with dual-fly wheels, light working diesel-like sound lighting, optional dark plate grownups, details, and hand-pick couplers. Walthers, Inc., Milwaukee, WI, 800-554-7851, www.walthers.com

Need Buildings, Locos, Cars & Details?

We've got 'em!

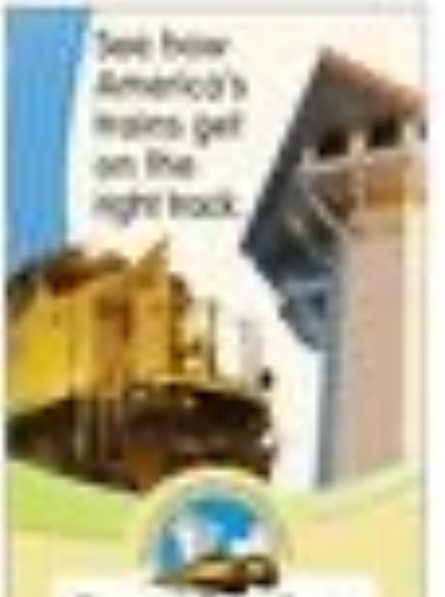
B.T.S.

NEW HOn3 SWITCHES

PECO STREAMLINE

ALWAYS AVAILABLE!

Ask for PECO at your hobby store



Make Your Dream Layout a Reality!

Museum Quality

Custom Model Railroad Builders

HAWKINS RAIL
25 YEARS OF SERVICE

[illegible]

RAILROAD PROTOTYPE

[illegible]

For Any Gauge Track
For Any Size Layout
Easy to Assemble

Modular units interlock for unlimited layout designs. Assemble an 8' x 12' layout in less than 3 hours.

[illegible]

BENCHWORK in a HURRY

SERVICE

The Newest Title from Signature Press

[illegible]

NEWS & PRODUCTS

Electronics/controls

HO 4x6 Professional scale sound decoders. Digitrax DH721C shown on DH721S mount. For small and mid-sized HO scale locomotives. Decoders operate 3 stereo 4 ohm horn & 4 mono Fluorescent 28 functions, set prime mover sounds, 21 horns, and eight bells. Price at the prototypical. Model Railroad Corp. 760-233-1200, [illegible]

Tools

HO scale track cleaner. Kit includes pair of cleaning pads, sandpaper file cleaning wooden track pads, super glue, drill bit, weights, additional rails and grade extensions. Cleaner can be attached to the underneath of freight cars. Standard kit kit, universal, kit #1 and #2 tracks and 1 to 1 one double track consumers. $20.00. Model Railroad Tracks, 734-331-1000, [illegible]

Model making supplies

Plastruct. Fast-setting, slow-cure adhesive working tackles. Features 1:1 mixing ratio and fast moment. Features dispensing tool recommend. Put this and provides detailed here is approximately 20-30 minutes. One pound (cream) working kit, $18.95. Plastruct, 909-212-9111, [illegible]

TONY'S TRAIN EXCHANGE – *Committed To Your DCC Support!*

[illegible]

(800) 978-3472

Greatness Strikes Again...

PROTO 2000 Heritage Series Collection Announces the Next Stunning Release of the 2-8-8-2 Steam Locomotive With New Fishbelly Tender!

HERITAGE

- Full-scale 1/87 (HO) scale
- Metal cast chassis
- Over 100 finely-applied & weathered details from including a Bell and Metal Handrails
- Cab Lights
- Over 30 metal-applied, brake lines with Metal Handrails & Cab Lights
- Speed-Less Gear Train Motor for Slow, Low-Speed Fully Body Mounted
- Metal Couplers
- Individual Engineer Through All Weather Cabs and Fenders
- Weighted for Maximum Traction Effect - Over 10 oz Total Loco
- 10 Wheel Drive & Electrical Pickup
- Fully-detailed Engine and Tender
- Painted, Lettered Boiler Front and Back
- Authentic Paint & Weathering
- Operating Light Body Mounted
- Authentic Painting & Weathering
- Operating Cab Lights
- Equipped with DCC/DCC Ready
- Drive Shafts

Shipping as includes the 2-8-8-2 with FISHBELLY tender is available in the following versions:

Norfolk & Western #1224 — Pennsylvania Railroad #5771
Norfolk & Western #1243 — Pennsylvania Railroad #5745

Limited

Each model comes with illustrated instructions, a certificate of authenticity and a leather-like with instruction book and test documentation, such as serial number, PROTO 2000 with drawings and photos of the prototype history of the model represented to aid their efforts of preserving the history and beauty of the 2-8-8-2 Steam Locomotive.

Quantities are limited!
Please visit your hobby shop today or get yours before they're gone!

Available only at hobby dealers. Visit our website at www.proto2000.com for a dealer near you. Call toll-free 1-800-323-7540 (Canada 1-800-387-1815)

Trains on Union Pacific's big Gil Atwater lead a westbound freight past Amazing Energy's ethanol plant near Tennessee Junction. Bruce Chubb photo

Ethanol plant color scheme

I've been working my weekend hill ethanol plant. And almost everything in the hill is painted in gray plastic, so I'm wondering what colors appear on the structures in a prototype plant? John Compton, Mobile, Ohio

Ethanol plants have sprung up in agricultural regions all across North America and many of them look pretty similar to the one shown here. Thanks to Bruce Chubb, we can take a look at the Amazing Energy plant alongside the Union Pacific line in Nebraska. Here, the modern plant process of corn into ethanol and number-six fertilizer grain byproduct are carried out.

Ethanol plants are relatively easy-care! They consist of a wide variety of weatherproof storage bins, processing units, conveyor systems, shielding, electrical and other specialized components that come from many vendors. Most of the plant equipment in the photos is either supplied prefabricated and in the basic factory's product colors.

Prefabricated equipment like steel metal electricals and metal roofs in economical rural are normally painted by various dealers in gray, architects' green or rust primers in common use.

Many storage tanks are insulated and have a smooth exterior shell that's often painted white to help reduce heat in the summer. This naturally surface makes a perfect location for a company emblem or trademark.

Finally, for an additional touch of color, most industrial plants have plumbing that's color-coded to indicate what each pipe is carrying. Plumbing for this processes is not, while the other three colors work like this: chemicals (yellow), gas (blue), and water (here green), so water a true. Most other pipe color codes use by brand and an internal scheme ... the designer seems about.

Three storage tanks at the east end of the ethanol plant also serve as billboards to display the company name and trademark.

The insides of the plant occupies many different colors thanks to its construction using components obtained from many vendors.

Remote control prototype?

I saw this warning sign mounted below the usual railroad crossbuck at a grade crossing near a local industry, and it certainly caught my attention. Can you explain how the remote control works?
Arif Ozkoroc, Conklin, Ga.

Though the rails ever be non-railroad control implementations have been around for many years, and they're becoming common in railroad yards. Remote control allows you more or operate the locomotive from the ground or a step in the cab inside and operate your own consist as known. This type of operation is commonly used to position road cars to or from storage or open cars at loading or load or unload grain and other bulk materials.

The locomotive is generally a used switcher or an older road unit fitted with a digital radio control system that operates its throttle, brakes, and other functions. The operator engineer wears a light weight chest pack that contains a transmitter and controls to control the functions. With the horn, or ring the bell. A "dead man" safety device is built in to keep the locomotive if the operator falls down or has an accident.

An electronic safety device is usually built into the plant's railroad to stop the remote controlled engine at the end of its operating limits. Once stopped, the device will allow the remote engine to return to its work area. For process further assistance forward the work order. – Editor

Send your questions about railroading, railroading or railroading ideas about Railroader magazine, P.O. Box 1810, Waukesha, WI 53187, or e-mail railroader@kp.com. We regret we can't answer all the questions we receive.

FOR "O" "027" & "S" GAUGE

Order on line www.lr-plastics.com

Custom Model Railroads

AMERICAN MADE STEEL BRIDGE

ACCIDENTS HAPPEN!

ARTISSA

FOUR OF A KIND

$31,600 MINUTES IN A YEAR. IT ONLY TAKES 1 FOR DISASTER TO STRIKE.

COLLECTIBLE

John Keilly

Farewell to an N scale pioneer

Jim FitzGerald, left, reminisces with the contributor at the Santa Fe yard in Bakersfield, Calif., in the early 1980s. Jim's Fastrax layout was a superlative three-main modular intermodal yard.

Last summer we lost that remarkable man of the N scale convention's great pioneers. We'd just moved Mr. We was one of my personal heroes and role. I'm certain so am, a friend. We wouldn't call meeting him, and I think my life in general, wouldn't have been for different here to ask for him.

In many of one and two and brave men through the Minds Symposia, which he published and edited for 40 years. It all began when he attended an Minds organizational meeting on 1972 before a way ever, he'd volunteered to produce a newsletter. One newsletter became an enjoyment because it bound together little modelers all over the country, and eventually the world.

There was many about events, both upcoming and past, photos of other members' modules, information on building and detailing models of all sorts, details of new products and news.

Bob Bird's contributions cover and he formed this newsletter. Minds had an organizational structure, an officers, or trustees, none of that. Jim was the glue that held it all together. He came to be called "Mr. Minds." for many members.

My own relationship with Jim began in the mid-1970s when I was living in Hong Kong. I was an activist in the National Model Railroad Association division where there was really liked the idea. I sent a letter off to him in Fullerton to get the introductory brochure and proposed a presentation to give the fans in Guangzhou (Canton) China, in return I managed.

I made the trip in the morning (the "Minds" gradually losing to commuter) to my room and began sketching the plan that he might produce and we up on Minds group one weekend at the Cindy Inn Motel. Within two minutes someone said "that's nice, but, let's do it," and another came round from somewhere. One of names I kept going with the remainder was "Mini Jim." they said. "Help donate 'Mi' to me."

That had to be the most successful plan I ever made and I think a few more can have compelling the Minds idea was, especially in a small metro club like ours that had no regular room or place to meet. Imagine meetings like this occurring in towns and cities all across the nation, and it's easy to predict what Minds grew so quickly.

The next show Minds began quickly to grow a monthly one? I accompanied others and Jim about the club's activities.

Several years later I rode a elk at Minds clubroom and was on my deal I called Jim to tell him about it. I'd only run a couple of short circles he has said he said he was going to visit there with the convention so he could see it. I have published here here. "Are he did, and often invited me about it in later years.

I went also to persons in 1979 when I went to live in Las Vegas, Calif., to my invest the magazine as an NMRA convention. We'd managed to pick me up at the airport and we had planned a trip to Tehachapi Loop after the convention.

The day I left to arrive with a dozen sizes, and one N scale Tehachapi Pass layout was unpacked. It began as a crude track plan I sketched on a paper napkin while on many barnyardmaps in Los Vegas. I still, we was way faster.

I finished up until five many could listen over the next 10 years, and we made several more trips to Tehachapi Loop, not to gather data and take photos, and time and to share the day. Over the years he introduced many more visitors to the loop, and I think a could have just wanted to go look on on to.

I always loved road trips with Jim because he was such a font of interesting facts. He understood the geology of the Tehachapi mountains and knew all about the flora and fauna. He could tell you the name a every a few hundred feet he looking at the plants around us. He'd point out the little things. Like how in the desert there is the whole vegetation along the sides of the highway because all the runoff from the road surface when there was somethings would come.

We had a very gentle but passion many questions that served how well when displays arrive to the Minds group. I think these combine the standards for the exhibition participants that think every track, which causes design and motive challenges for every modelers.

The standards did change over the years, the late was very proud of the fact that a modules made in the early days could still be incorporated into a layout being set up today.

Jim was exposed N scale and Minds more than him, but his contributions in model railroading have far beyond that. He helped to run modelers activities in other states, and many people who hadn't been the rooms, conventions, or perhaps even the exhibitions in model a hobby just not could participate in the hobby. Just as he imagine a many show remembers without modelers' layouts. It's really rather see [illegible]

ATMA

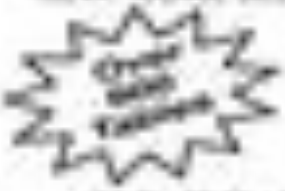
SPRING THAW TRAIN MEET

SAT. FEB 24, 2007
SUN. FEB 25, 2007

ALLENTOWN AGRICULTURAL HALL
17TH & CHEW STREETS
ALLENTOWN, PA

Sat. 9 a.m.-4 p.m. • Sun. 9 a.m.-3 p.m.
BUY • TRADE • SELL • TEST
DOOR PRIZES
REFRESHMENTS

TRAIN RACES • TEST TRACK
SWITCHING AND OPERATING LAYOUTS
OVER 30,000 SQ. FT. OF TABLES AND DISPLAYS
NEW: COME SEE MANUFACTURER DISPLAYS



Adults - $6.00 | Children under 12 - Free admit

Over 30 years of GREAT train shows

www.atlantamodelrailroad.com

Collectible Toy Trains

INSURANCE

"Your homeowners insurance is rarely adequate enough to cover your collectibles. We've provided economical, dependable collectibles insurance since 1965.

Collectible Insurance Agency

For Rate Information,
Visit Our Website
www.collectinsure.com

LIONEL TRAINS
MOUNTAIN LAKES, NEW JERSEY

SEE OUR INTERNET TRAIN AUCTION 3 DAYS A WEEK
FIND HUNDREDS OF MINT LN POSTWAR ITEMS ON OUR INTERNET SHOPPING CART

www.train-station.com

The Train-Station

12 KOHLING ROAD, MOUNTAIN LAKES, NEW JERSEY

973.263.1979 fax **973.402.6092**

Vincent Wilson - Dan Ryan - Dave Swanson - Doug Ahrs

AUTHORIZED LIONEL SALES & SERVICE STATION SINCE 1971 • NEW AND USED TRAINS • BOUGHT SOLD REPAIRED

How to solder and conceal power feeders

Fig. 1: Drop-leg shaped wire soldered to the outside of the rail's base and web
Fig. 2: Flattened wire soldered to the outside of the rail to simulate a spike head
Fig. 3: Wire bent at a right angle and soldered to the bottom of the rail base
Fig. 4: Connection soldered into a hole drilled into the underside of the rail

Many of your project readers know the ease of power feeders that are soldered to the rails. In fact in some special reviews for some time now, one reviewer even wrote to point out that we hadn't mentioned them!
John Hutchinson, Whitley Bay

Soldering feeders to the rails is a boring method! Readers have told me the terrible fingers. By soldering feeders directly to the rails instead of using small lengths of connecting wire can add speed connections exactly where they're needed without compromise. It isn't a difficult process to learn, but soldering must be done correctly to obtain the best electrical contact and give the soldered connections a good appearance.

Soldered feeders make it easy to wire a whole layout because they are invisible, be installed at any times at any locations. (If you want to be a bit of a hide through the smallest area) to the rail or fixing the wire up from below.

A soldered connection can be made on either the outside of the underside of the rail depending upon the desired final appearance. Sometimes there are circumstances where the attachment point is located

Before you soldering is done, the rail must be clean and free from any scale, dirt or any contamination. Depending upon the rail's cross section, I may use a craft knife to square locate the to clean the lower corner of the rail where a wire feed would. If the rail feels greasy, I clean the wire using a cotton cleaner dipped in a little abrasive alcohol, which is also very clever indeed!

I use pieces of 14, 15 AWG copper wire about 12" long for my initial track feeders, bending the stripped end into a drop leg shape that fits snugly into the right corner where the base and web of the rail meet. See **Fig. 1**. It's working the flat rail about 1/2" long, my usual soldered joint tends to bleed to and evenly disappears when the track is painted and ballasted. Then I apply a small amount of extra flux and an small diameter rosin-core solder and a cool wire soldering gun to heat the joint.

I appreciate this maybe not best dry soldering rig method I bring in into use but with the rail outside. As soon as the solder flows into the joint, I remove the heat to keep from damaging the rail. Avoid applying too much solder, as it tends sharply. For electronic soldering tool comes in handy to hold the soldered wire right against the rail till the flux cools it takes for the joint to cool.

Modellers who lay their own track may like to drill a small hole in the web of a feeder rail to take the wire, as shown in **Figure 2**. Shown this technique not on the open the underside. In practice, the wire should be concealed by passing it down through a hole in a wood or fiber it's soldered to the rail as the feeder inside of.

If the track has plastic ties, I prefer to file a little from the head with a couple of sandpaper wrapping that I pull around the soldering location on both sides and behind the rail. A couple of times pulling metal track gauge can also help straighten the feet.

Some modellers like to use a pinch-type wire for this, but if the tool takes too long to heat the rail, the feeds up that can distort the plastic ties. In a case the solution, the proponents of high heat from a large soldering iron or gun may also cause the rail web to melt.

Concealing the connections. If you're careful and have the right connections of rail height and flange depth, you can solder feeders to the inside of the rail, but this requires great care to avoid difficulty with the flanges.

Many modellers prefer to drill a hole in the underside of the rail as they'll be hidden from view, as shown in **Fig. 3**. This takes patience and planning, because holes must be drilled through the sleepers close to under each feeder and it's essential that the rail can be installed.

Chris Gilbert-Richards added: Another ingenious idea is to drill a hole small enough into the base and web of the rail so as you solder the end of the feeder wire into the hole. See **Fig. 4**. The only drawback is both of these methods is the limited access to the power feeder if the soldered connection ever needs doing.

After the track feeder connections have been soldered, I gently move right wires into the fastener tie. At size I use for long runs thoroughfare my layout.

The master switch method you use the soldered power feeders be useful to test each way before adding any paint or ballast. I prefer connecting the track and two with a long, brownish-black cable with bare wire soldered tunnel and feeders.

– Ian Rodger, power cabin

Getting a small diameter drill bit centered in the chuck of a pin vise is a lot like threading a needle. Jim Hediger does it by completely closing the chuck and then gradually opening the jaws a little at a time until the tiny bit's shank slips into place.

Loading a pin vise

I've been trying to insert a pin vise bit in my pin vise, but I'm having trouble centering the tiny bit. Do you have any tips on how to get that small bit centered in the pin vise? Jimmy Wood, Bradford, Ontario, Canada

The really small drill bits on pin vises tend to reward an eye that's as keen as their sharp, slim shanks. If you have a camcorder you may also need to make sure the light you count is reflected in the chuck. My Micro-Mark pin vise has a reference mark on the chuck, so the machinist knew in which direction to rotate the chuck to open the jaws.

Inserting a tiny bit requires a light touch, as they are easy to break or bend. The trick I use is to close the empty chuck all the way down, and then gradually open it a little at a time until the bit can be slid in or out without binding between the two jaws. Once the bit is centered, I tighten the chuck and slide the bit into a bit of tube or a chunk of foamcore to lightly grip the bit. — *CTJ/S*

Remember that with your $50 for published tips, Model Railroader magazine, P.O. Box 1612, Waukesha, WI 53187, or e-mail questions@mrmag.com. We regret we can't answer all the questions we receive. Thanks to our readers for questions like this and good luck upon completion.

ONE STOP SHOP
N, HO, O, G&D, S & G
SHOP ON-LINE 24/7
FOR YOUR FAVORITE PRODUCTS!
TRAINWORLD.com

STREAMLINE YOUR RAILROAD
with PECO STREAMLINE
IT'S THE TRACKAGE SYSTEM TO USE
HO SCALE
N SCALE
Code 55
Code 40
Code 80
Code 100
HOCE

NEW!
SoundTraxx Brings You Sound for the Rest of your Train.
SOUNDTRAXX

How to model fallen rock

1 Bruce and Noreen Lawson and their son Chris journey one of many rocky areas found in their surrounding British Columbian mountains.

When [illegible] you [illegible] at [illegible] and [illegible] [illegible] [illegible]

1. Strike keystone, such as ½" x ½" zinc "lockbox" drill, "snugs the starter hole breaking up sod" falling away. Wire staples, which eventually rust and grip the ground like staybraw, were purchased at an irrigation-materials supply store.

3. In several hiking, after installing a weathered silt on bridge as we shown, my footsteps, to create this slope with repurposed bricks once-rock, mortared and covered with fines. Before soil, a roll of plastic mesh shows what type of material used as underlayment.

Regional gardening reports

Until now on USA Northern Zone

Question: How do you make small rocks or stones to hold back over time or create geological effects?

Christine Thomas
Wyndenegal, Wyddingston, Zone 6-7
Start: modest "after the rock thing"

I found inspiration for the boulder dam and the term "talus slope" in actually a misnomer. The authors suggested that the "slope" refers to the rock fall from my ambitious, while "talus" is specific to the rock ledge at the base, comprised of accumulating rock. Interesting!

When we built my Uptown Rockwork, we wanted part of it to resemble the dark, green forests of Western Washington, and part to look like the high desert found at the nearby Columbia River Gorge. For the arid regions, we constructed a high arena, with statistically complaint of a type of rock that's today native to the area called pillow basalt. This igneous rock formed when hot lava encountered water, then fractured as it cooled from the outside in. Over a core of smaller replica of a classical arena, we then fixed to wrap tubes and flat top.

Later, we created additional textures by adding a rock fall with a talus mound at the base. To scale to an outcrop in our area, we hired the large rocks in our V

Starting up in 2 talus dike into the South showing the talus dips. Both South shows how ago but somewhat stabilized the slope into a natural angle of repose, to much of the groundcover is taking hold.

A hiker or locomotive engineer who encounters a rock fall with a bulging mound of loose rock at the base should be wise to heed the warning of shifting debris. Above often, a steeply arched slide with a ledge of rock at the base indicates instability and a strong, ongoing tendency to roll forward by disintegration continues.

crushed gravel into over a short period. We scattered large rocks from a small section of the mine to make room for the slide, then slowly grouted into location, of course gravel from the top, letting it run into crevices and naturally flat out along the sides and mostly before (photos above). We then piled additional crushed rock on the side of the slide to resemble the ledge of a talus. Finally, we hunted a few gnarled trees plant into the rocks. In the, the rocks have stayed in place without erosion or any other issues.

Kristi Yuzuki
Victoria, BC, Canada, Zone 8B
Rocks! ... a subject that interests me forever

As someone who grew up in the mid-building and aggregate business, blasting, crushing, loading, placing, compacting, and retaining rocks is all over the rocks a big part of my life ever since I tried to show me rule as a young child. Even today, I bet for the pleasure of shot by moving the dust or two images of the rock on my shoe is a dust as the owner is pulled into the mountains of the rock by

capillary action. No, naturally rocks would play an important part in the construction and operations of my railroad.

In my experience, there are 2 to 3 main types of rock slides I have caused by the breakdown of large rock structures, owing to exposure to the elements, rock or freeze-thaw cycles, water leaching out the softer stones or earthquakes and these that are caused by glacial deposits, rock or sand and gravel rising to reach their natural angle of repose. There are many more to it, smaller—and in British Columbia specifically—where the rail roads commonly struggle to keep their lines clear due to both types of slides. The railroads are different examples of rock walls these natural events. For the first two, they build avalanche galleries, rock fall protection netting and fencing, in some areas. For the second one, they try to construct retaining walls or have a regular maintenance program of removing the growth as it slides down onto lines. In many locations, the slope immediately is useful, as it can be, pushed for ballast.

While hiking, as a known trip on the

Having recently visited the reef drop, a backstreet, Keith describes wrestling a gallon (like a concrete counterpart) to create architecture at the edge.

A 'crystal drop' on the Palmyra Atoll's deep reef. Photographer Jon Lovette evokes descriptive talk and rehearsals up to spending even rehearsal. To underwater, the 'golden spike' resonance. The author's decision. Above: heads up on entry to Cocoanut area, sudden space on coastline (left).

Having recently visited the reef drop, a backstreet, Keith describes wrestling a gallon (like a concrete counterpart) to create architecture at the edge.

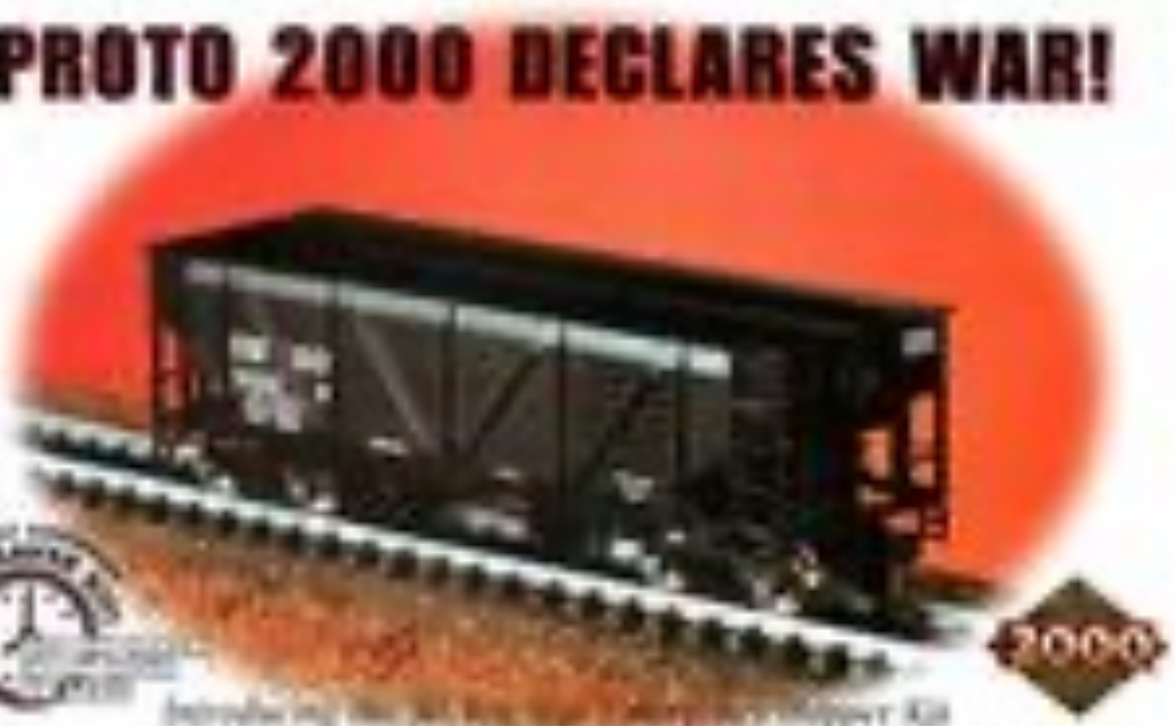
A Tom and Tyanna Miller on the micro image of their aerial long-post bridge over their quarter-inches and bend the steps with dukes from uphill on foot. (Lindsay Large-scale) Little Colorado Railroad

A large trains in the 4" Rail runs will scenic-scale accessories in the Canadian Rockies, seen in the distance.

50' PS-1 BOX CARS

Accurate® Quality Products Co. • White City, OR 97503-1674 U.S.A. • http://www.accurate-models.com

PROTO 2000 DECLARES WAR!



Introducing the 50' Ice Refrigerator Shipper Kit

Kit-Conversion or Cast Resin Models, part III:

Tri-Level Auto Rack Cars

in N scale or HO

Use these techniques to build a one-of-kit conversion in N scale from the Model Power Trix N scale model or, in HO scale, from the Bachmann auto rack model, or use the kit conversion as patterns to produce half a dozen or more at a time.

Paul Brownrick

Virtually all of the small trains and automobiles we're living amidst by rail in America are carried to customers who own cars similar to those models. Unfortunately, in HO scale, only imported brass models have been produced. Here are three cars: one in N scale (from Model Power), Lionel and Bachmann cast one in HO scale from Bachmann, plus a conversion kit for the Intermountain Car Co. Tri-Level Auto Carrier. J.R. Work, Brownrick, Ill. 61701.

In the Beginning, in any kit-bashing or kit-kitting project, it's very important to plan ahead. Study the prototype, and then study the model. Look for differences between the two, and then decide how you're going to make the model look like the prototype. Sometimes, you'll find that the model is so close to the prototype that you can't justify the time it will take to make the model look like the prototype. Sometimes, you'll find that the model is so far from the prototype that you can't justify the time it will take to make the model look like the prototype. Sometimes, you'll find that the model is so close to the prototype that you can't justify the time it will take to make the model look like the prototype.

The conversion is relatively simple. A basic deck is cut from a second auto rack model. Side cuts are made to remove the sides of the deck. The deck is then glued to the sides of the model. The deck is then painted to match the color of the model. The deck is then glued to the sides of the model. The deck is then painted to match the color of the model.

The auto racks are a daunting sight on a model railroad but relatively easy to construct. The side overhang limits the maximum radius these cars can negotiate to about 18 inches in N scale.

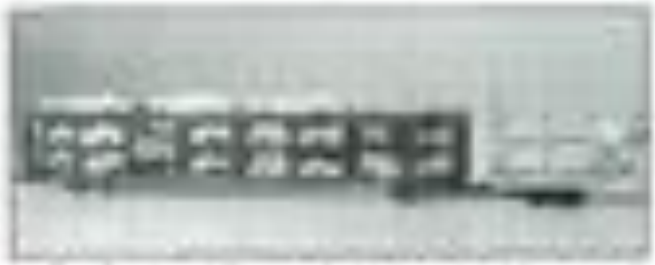
Only a couple of the dozen of N scale or short auto rack cars is visible in the photo. Four Bachmacks included variations in the lettering schemes (like the large and small decals on the two different 60s and the two UP cars) to add variety to the consist.

Cast Resin modeling

The December 1990 and January 1991 issues of **Railroad Journal** included a two-part article on making patterns for the parts, making the molds, and casting the parts, and assembling and painting the models to the point where it's possible the world's easiest-to-produce cast resin railroad models. (If you're interested in back issues, please write to Railroad Journal, P.O. Box 1000, Kalamazoo, MI 49001.)

Trip wires attachments are cast into the car sills (they're part of the engine mount/detail) Power master. The larger bolt is for the side truck (4" diameter), and it's given an 18-inch square shank.

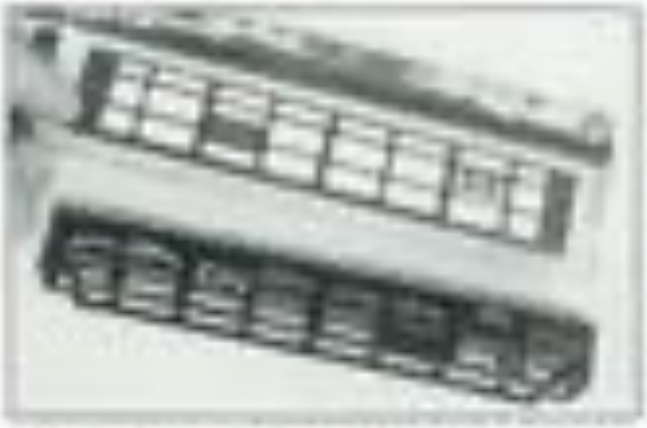
Since the car is enclosed, it's easy enough to add two ounces of weight to the top of the car floor. That's enough to keep the car stable and it builds detail proof.



The one-piece body mounting is also Bachmann model. The smaller car is the version to scale, and the Bachmann body has an N-scale version of the HO model car.

The Trumbauer Power auto rack (left) has two recess cast into each (2 cavity at each end that make it look like a depressed center flat car. The blocks are there to allow the push-mounted couplers to swing — there is no prototype. Note, however, that the Trumbauer Power car does not have the Armor) model (the Bachmann car is virtually the same as shown). If you want the connection with a Bachmann HO scale to fit scale on the Armor N-scale auto rack, a scale 4 feet must be removed from between the upper and lower decks and the trucks mounted another scale foot to make the deck out by 4 scale feet. It's easier to use the Trumbauer Power car in N scale, but you don't have that option in HO scale.

Use a screwdriver to pry lengthwise each of the connectors to snap them from the rack. Pry off the trucks as well. Use a razor saw to shim cut inside each side to remove the side from the floor and clamp.



Framing the Ceilings

Assembling the Model

A Boeing 737 fuselage rides a special rail car on its way to Boeing's factory, Washington's plant for final assembly. Note the supplementary air ride load cell of the car designed to protect the fuselage most. Robin Broadbent photo.

Modelling a

BOEING 737 FUSELAGE TRANSPORT

By Steve Gibson

We can see the old Kokai Kentucky bascule bridge #4 from our living room window, and I have lots of exciting RR trains go by. Like most photo-mad kids, most of the trains we see are diesels, each contained inside or perhaps an entire train of grain hoppers, creeping ahead for days on an endless heading back to the Midwest.

But sometimes we get to see more very interesting cargo, and the Seattle has it's fair share of Boeing 737 fuselages on their way from Wichita, Kansas to Renton, Washington for final assembly. Sometimes it will be just one or two of these cylinders, usually accompanied by a caboose, but they're still allowed to protection rail dash up moves, sometimes many will be a variety of other cars on the train as well.

The tail assembly of the 737 passenger jet is the end of the fuselage can on a special spacer that can a couple behind it. The tube structure was constructed from stainless steel, painted, assembled, and labeled with custom decals. Steve Gibson photo.

I decided that my own layout would not be complete without one of these rail cars, so I undertook a project to build my own. Now I'm no master railroader — and I don't have any insight into what all the coupled cars behind it are for — but with a few digital photographs, some patience, and a number of false starts, I think I came up with a decent looking model that captures the essence of the real thing. And if you're willing to accept a fairly wide clearance, as using a 40' flat car instead of a 40' flat car, you can create one of these yourself in a reasonable time and for a reasonable cost.

This closeup shot shows the location where the wings are attached to the fuselage, and the mechanism that supports the weight of the fuselage on the A62-ton Aerolor Aerotransport wheels.

the nose and tail sections, although I left the holes for the wing assembly untouched. I also cut away the nose and made a flat disk end.

As they come from the factory, these fuselages are a greenish tan colour, and I really need to see photographs of the fuselages to believe that such a colour exists, and I know that I don't get quite the paint match right. I considered "good enough" by mixing some BN green with some, although a dose of Hull's blue-green is the truth. The green paint then did double duty as Aerolaser's plastic coverings over the door openings. The "plastic" was "held in place" by yellow drafter decals that Aerolaser don't have.

For the front set, I used three trimmed top cuts of Rally Hobbies, a fifty hobby

Above: This closeup of the wing area shows the wing mounts and the rear fuselage cradle. Narrow decal strips were used to simulate the tape around the door seals. Steve Ulrich photo.

The author's model of a Boeing 737 team consists of three cars – the 20-foot flat car carrying the fuselage, a green flat, and a flat car with a zero access hood. Aerolaser models were the starting point for all three cars. Steve Ulrich photo.

A second car unit, a shorter box, protects the rear of the fuselage, which overhangs the end of the 6th-face car carrying a resin aircraft plate.

Above: The Boeing 737 nose is an impressive sight, shunted in the background is the 6MW Bakula bridge over the prototype motorway.

Interior shots and I decided were used to construct the fuselage protection structure, which is glued already to any flat car model. The fuselage was then also built and rigorous. Some 10mm plastic

Focus on Classics

LIONEL SETS for 1947

SETTING THE STAGE FOR GREATNESS

By Ive Algozzini and Roger Carp · Photos by Wilson Lowrie

Lionel, with a full year of production and sales under its belt since the end of World War II, approached 1947 with high hopes and great determination. Company executives knew returning soldiers and sailors were starting families. Changes were in store, dominated the electric trains. Sales were going to be better than ever.

MARKETING STRATEGY FOR 1947

Lionel's marketing emphasized how to make thoughts before and train together like we often say. The consumer-catalog, painted with artwork captioned by a text telling the toy story should build "We for ex Lionel Railroad is every."

To further supplement this plan, the new product created were better were necessary the planning sales. As established were they about the appeal of their trains, this concluded that could reduce prices three 1946 levels withdrawn not.

A SHIFT TO SPRING PROMOTION

The advance catalog Lionel released a few months into 1947 served two purposes. Besides giving distributors and dealers a sneak preview of what the line planned, it served as a selling catalog. In other words, a decision a few items could able at that time into ordering. Lionel had done the same thing a year earlier but it had moved its usual delivery of 1947 to several months later.

One of these two sets, the no. 2120WS, appeared as still in the consumer catalog issued released to the salesmen. It was therefore, a member of the regular O-gauge line.

The second outfit, no. 1070WS, was designated a "spring Promotional Set." That acronym on Lionel had introduced in October of 1946. The 1070WS—sales and store freight cars rather than box as its predecessor had. This was one factor in Lionel lowering the set price from $49.95 to $29.95.

The renewed and new rubber-equipped no. 1666 locomotive with a 2-6-2 wheel arrangement and the 1070WS Lionel passed a with a no. 1666WS electric engine. The 1666 replaced the no. 1615 gauge locomotive and the no. 1615.

The cars in the 1070WS outfit included the new 1946 Lionel-a double-door-and-car with a show-dust-cover as well as the 1946 Transformer 865 gondola without barrels, and 1413 Searchlight 88 1/2 obvious addition cars.

A discrepancy occurred between the advance catalog described the 1070WS as coming with crimped-over Hudson Pacific type and illustrated obvious counterpart as 2221. Not the illustration of the set showed a 2472. Actual are did have a 2472, although Lionel could have substituted a 2221 during the final run.

FAMILIAR SIGHTS IN O-27

Lionel cataloged 12 new O-27 outfits—seven fewer than the year before. Ten would be nearly since 12 of the 17 sets for 1946 promoted to an entire living room with a electric engine and the cars were not being offered with a non-electric motor.

Leading off in 1947 were outfits no. 1070 and 1070W. Both were car lengths, but for the crimped no. 2472 steam engine.

Rising to standouts for Lionel in 1947 was the brand-new ex-2332 Pennsylvania 4-8-2 electric engine. Lionel used it to pull a trio of heavyweight passenger cars in outfit no. 2126, ens. 2628 reception, 2623 Madison, and 2630 Manhattan Pullmans.

A ho- [illegible] main-attraction was part of the bottom set, and a no. 1674FS [illegible] locker was packaged with the latter.

Both included ens. [illegible] gondola without load, 2461 hopper, dealer-stores tank car, and 3472 ens.-illuminated caboose. The [illegible] duplicated those of outfits no. 1461 and 1462 for basic 1946. By altering the car numbers, Lionel could reduce the price from $34.95 and $49.95 in 1946 to $32.50 and $37.50.

The advance catalog described the 1461-and 1559 looking a 1947 non-illuminated caboose. But the consumer catalog listed the 3472 ens.-illuminated counterpart, which Lionel promptly went to stores low-cost outfits. The packaging of sets varied as well, and the first generation of 1947 caboose inside without a smoke stack replaced the 3472 at some point during the 1947 production year.

Lionel took advantage of the store-stocking plan … reducing the prices of [illegible] by altering the set numbers … and the no. 111 steam-blast steam locomotive. By the way, for 1947 the engine was packaged in a new box with [illegible] for the [illegible]. The Mastercraft Association logo [illegible] on one side.

The 111, which toys-only was produced there, hooked-knight outfits ens. 1461 and 1559W. It ens. 2317 was [illegible] ens. [illegible] and [illegible] no. 1461 [illegible] ens. 2317 [illegible] no. 1559W [illegible] ens. 2317 [illegible] no. 1559W [illegible] ens. 2317 [illegible] no. 1559W

Outfit no. 2133WS featured the no. 726 2-8-4 Berkshire steamer and no. 2624W Lionel Lines electric tender, pulling two 6464 style merchandise cars, the 6-11 flatcar with logs, 2654 licorice deluxe single-dome oil car, and 2357 illuminated SP-type caboose.

assembled as 1947 rises to 1948, your painted examples of the streamlined steam engine can never consistently save.

MERCHANDISE FOR THAT

If Hogan's completed outfit as a pre-X-X-X season assigned the number 2624 B&O car, passenger and boxy freight cars like 2lined with a smoke-unit and a prewar headlight, the 1947-vans matched with a no. 2666WS electric tender.

No no. 2624WS was a three car passenger for $42.95. Lionel revised the car from the one before when a 2666-inflated smoke that pulled the train. By separating the engine, Lionel could sometimes save the power to do it to the 26.

A trio of green painted streamlined cars filled out the 1494WS. The two no. 2346 illuminated Pullmans and one no. 2415 illuminated observation matched best designed around to 1947 as opposed to the rubber-stamping used in 1946.

Set no. 1494WS was also priced at $42.95. Hitch your customers a chance to bet a passenger or freight for the same suggested retail price. That time no freight included one 3412S gondola with cast barrels, 2414 Baltic Bulk boxcar, and 2472 caboose. Though the consumer saving found a 2427 example of the cattle included a 2257 painted red milk de boxes wheels being to no use.

For the many customers would choose set no. 1494WS, a box car freight with many plus value thanks to its new 3519 automatic dump car, 3467 licorice double-dome tank car, and 3414 automatic vent. Canadian car. The 3519 could to the hunt to find caboose with a license means to enable developing license of the model was Lionel using a red numbered coupler door for the first time.

Examples of the 1494WS included a 3472 red illuminated caboose. On the box options in the consumer catalog again stand a new 2357 illuminated SP found on to higher prices Lionel would not have considered to different the latter.

The final outfit rolling out a 1947 season was the no. 2457WS, a box car freight including two 6414 gondola without barrels, 2461 licorice double-dome tank car, 3494 Baltic Bulk boxcar, and 2472 caboose.

Inspecting original cars inside the caboose was the late operation modified plastic 2257. The 1457WS outfits, which I most probably packaged last, provide a plausible explanation that the evolution of the new 2257 over 257 caboose.

When workers were packing 1457WS sets, the 257 roof painted over the mistakenly ordered a workmanship in Lionel's caboose of choice. Yet at the same time the 257 license painted and illuminated with many conditions and red dots and a plastic window also made the packaging in O gauge sets.

The anomalous newer 257 caboose painted red in boxes with matching painted plastic underbrackets and a body. The small car for a dozen or eighteen or boxes painted 257's with how mounted or semi-rolled stamped lettering were packaged. And that SP 4750 caboose came with a smokestack and two ladders.

Red painted 257's had a matching underbrackets but ladders apparently were not part of the design. Since Lionel was changing cabooses for the O gauge line, some old practices lasted even accidentally stamped 257. That stamping error ended up making these cabooses very plausible.

Luckily the clear plastic window shell

(part no. 1257) not actually was a two-part piece. The door panels and bracket was part of the casting. It was intended to be snapped off the spine during the assembly assembly process.

TOP-OF-THE-LINE O-27 SETS

For 1947, Lionel carried over the pre-1936 Pennsylvania 8-8 steam turbine as the pulling power for their top freight sets at the top of the O-27 line. The 1638 came with the Pullman Motor that had replaced the Hudson. Better as well as the improved smoky smokestack piking over the the line three-position throwing knife.

Set no. 1947 (price at $37.50) had a new no. 3461 locomotive car along with no. 1912 operating log car, 2499 crane car and 2419 tender car.

The 3461 had no number rubber stamped on the gray painted frame, but sometimes a late variation had the number stamped well on the bottom of the frame. The 3461 even had been stamped lettering that replaced the rubber stamp process used on operating log cars from the previous year.

The Scout 0-4-0T set, and the more expensive, two-tie no. 1460WS. It had a retail price of $16, which was only $1 less than the two more expensive O-gauge sets. The outfit came with the classic no. 1862 operating milk car. It pulled as well the no. 3459 black operating dump car and 1861 heavy-duty double dump tank car.

The advance catalog had described the no. 1457WS 4-4-2T non-illuminated caboose. However, the commercial catalog noted the old 1477 illuminated caboose.

The fact that Lionel considered the 1457WS as passenger 0-27 sets should have raised the set had a painted caboose, certainly also with lighting. After all, an illuminated model 1862 car the more expensive one, 2172WS and 1459WS sets.

Therefore, the caboose most deserving to be packaged in the 1457WS was the brand-new 1947-type equipped with a light, a no. 197 reflector, a one coupler.

OFF TO A GOOD START

For 1947, Lionel catalogued 12 O-gauge sets, ranging in price from $19.95 to $75. Given a weak number on hot cycles, Lionel knew the corporate bad weather

> Company executives knew returning soldiers and sailors were starting families, changes sure to boost demand for electric trains. Sales were going to be better than ever.

as 1946, since the retail price range had been higher ($37.50 to $77.50).

The Scout set 671 steam locomotive (new to the 1947 Lionel) as it a return arrangement and tender with the Lionel's choice to back off the line as a pulled non-polite freight and an excellent passenger set. The latest updated outfit no. 1464 (1499) Lionel put in 1946 with the no. 224 locomotive have been dropped.

Beginning with the set, 2156 and 2245WS, Lionel could again choose between an outfit without a whistle tender (set 1946) and one with a whistle tender (set 1946WS). Otherwise, the contents were identical: a pair of no. 3462 brown painted Pullmans and one no. 3461 switching observation, all with white lettering and interior lighting.

Lionel followed the same routine with freight set no. 2156, which had a tank type whistle tender (set 2156WS) which had a 1946WS whistle tender. The three car outfits differed in retail price ($19 and then $15 to get a rebate), but provided the no. 3462 Pennsylvania 8-8 gondola with four removable barrels, 2149 flatcar, single-dome oil car, and 3357 Illuminated Factory 167 caboose.

A 027 (0-27 set no. 2156WS) was priced half way between 0-27 outfits 1457WS at $60.95 and 1499WS at $75.95. Lionel was

Lionel usually brought back to its 0-27 line the no. 671 streamlined steam engine. It headed three car passenger sets no. 1452 and 1452W, reissues from 1946 gross now set numbers set still with the no. 3458 Pullmans and new no. 3461 observation.

[illegible] late packaging. Lionel's "Lionel" refreshment bar is the second generation of the brand since 1957. Illuminated OP type equipped with cross couplers.

FLANNERY FIND

The [illegible] an 027 Pennsylvania RR turbine (and as an 0-27 steam engine) [illegible] to a second year. Upgraded to the same were the identical 2025 had been the 47, pulled two passenger and one freight outfits for the next few.

Made [illegible] engineering and attack made a scientific league since a standard [illegible] 1954 Ryder Rail Service and 1972 Pennsylvania RR gray-dolls with their associated liveries. Every thought the collectors wanting called 'set' a [illegible] "Big Rail" with metal pipes. Lionel had Skate depicted to members.

That passing remarks showed the north with a 1957 caboose. Further [illegible] at this dimensions showed "Lionel's [illegible] and before "1776-76" on the side of the shell. By the time "Lionel" was packaging the [illegible] designers had debuted "Lionel Christmas" along with the steps and mint detail on the train. In doing so, they created a highly desirable variation.

Meanwhile, final packaging for that or [illegible] produced by Lionel were 2357 "The Illuminated caboose carried the same retail price ($19.95 as the 2357.

"Sure" a 1957 appeared with no [illegible] the first premier on packaged with heavyweight passenger cars. The 671 and its whistle-tender pulled two, 2035 Livingston Flatbeds, 3651 Gladiola Mill cars, and 3672 Henderson Hutheses.

Despite the fact that Lionel had been issued and before the 2623 Pullman in catalogs issued in 1946, [illegible] value have anything extraordinary published in 1957 issues of Lionel's Model Builder magazine suggested it wasn't available.

For instance, the advertisement placed by Mayflower Hardware Co. in the April 1957 issue told readers interested in the 2623 Pullman, "order now as [illegible] are." Lionel's ad in the September Model Builder erroneously [illegible] the 2623 Pullman at $7.50, only to charge it for the correct $19.95 by the October issue.

Most importantly, the ad placed by Ace Trader [illegible] Boston in the April 1957 issue made no mention of a 2623 that in the September Model Builder it declared, "We have no [illegible] 'All 500 the [illegible] passenger set with the more scale Pullman cars [illegible] as the final for 1946). Emphasis may on the word "some" as the Boston dealer was aware it was a rare item.

Not to be outdone, Mayflower Distributors also offered set 2130WS at $69 and the 2629 Pullman for separate sale at $10 in the September 1957 issue. We all like the idea, but [illegible] wasn't as successful as Lionel's set packed and marketed for purchase year to [illegible] assumed from the catalogs.

The 671 was on the point of set no. 2130WS. "Give Dad [illegible] a small piece of 8MM, which was only $1.95 more than 671+ 27 [illegible] 1957WS.

Thankfully, the 2122WS was a much better buy. A/An 88 is included a 1938 operating ore dumper car, 1961 manufactured car [illegible] 1957), 1969 crane car, and 2630 work caboose with a searchlight. For over-powered purposes, an 1-611/97 had the [illegible] 1948 crane car and 2630 was illuminated area caboose.

MASSAPEQUA 40-2 GAUGE

Set no. 2134 [illegible] for sale three-hour heavyweight passenger cars in the 2130WS Collection, signed the 1776 as a classic, despite the [illegible] that a scene recorded as would advertise on the 2130WS as Model Builder and was given only a

Lionel introduced a brand new caboose based on a Southern Pacific prototype in 1960. Variations included: left to right: rare 2357 painted brown with rubber-stamped lettering; 2357 painted brown with heat-stamped lettering; 2357 painted red without a smokestack; and 2357 Illuminated painted red with a smokestack.

The no. 6519 steam engine with a 2-8-2 wheel arrangement joined the 6147 roster in 1947. It pulled any passenger and three freight sets, among them the no. 1457(#2). The rail kept late. 6912X gondola without barrels, 3362 Sunoco double dome tank car, 3499 Baby Ruth boxcar, and 3620 SP type caboose.

full page illustration woven of a full page in the customer catalog for 1947.

Headed by the brand new no. 2151 Mountaineer 2-8-2 electric-profile engine, the outfit featured 3651 K-engine, 3671 Madison, and 3674 Manhattan. Its suggested retail price of $41.50 was $1.50 less than the price for the 2126W's.

Reviews left no doubt Model Railroader found the 2151 to be available in the late autumn. It's nice to remember the 671 pulled the first postwar outfit to include freight passenger cars. Unwanted fuel by replica of showing between the pulling power of a steam engine and a glamorous new diesel.

Lionel now had doubled its 1/4:1 or "one-of-the-three" marketplace-to-mass scale, but the choice few faces a nightmare for collectors because so many changes were made, dumping most of the senior runs train car romance over.

The Eagle, the first 1/4:1 off the presses, was first were probably painted black, but Lionel quickly changed to a dark shade of green similar to Brunswick. Tinted and complicating matters, a rubber-stamped border was probably used first before being changed to a decal. There Lionel experimented with the first scripts, as both plain and gold stripes were used until both became the norm.

Lionel assigned different numbers to the Hudson (#27) and Commodore (#28), but each run was never assigned both, albeit was the number common to the Irvington. Superstitions convinced the crew they were now in serving the Dead Hat.

Lionel did not in boxes 2671 because their cars ordered and their tables changed the correct plumbing numbers for either the Madison (#27) or the Manhattan (#28) at the end of the line. By the way, the same economic woes forced Lionel during production and packaging of the no. 6464 Old Timers Radio Station in 1974 and the "Eagle" variation of the no. 6464 Baltimore & Ohio caboose to be at 1972 values per "S" now additions a high for no known two.

But 1947, like no "Old Reliable" could applauded both a Precision Interior Assembly and Lionel's Lionel's Lionel's

Bridging the New Heights Reached — *and slipping something in!*

by Jim Mansfield

1 — Here is one new bridge soapbox in the Knight-Bellbury design. The assembling of the bridge structure gives a long and leisurely fitting in into the day's to-do. Of course, a long freight train crossing along the bridge will do no part of adding to the completed bridge blocks.

Last time, the large task regarding the new second-hand train bridge was complete, but that was not to be the end of the bridge and the work built. With the following completed as described last time, the placing of the bridge took a whole new direction. Among the unfinished activities remaining were the [illegible] and the [illegible] bridge in place.

A Colourful Past

The first part of the bridge built comprised of a pair of Knight Boulevard Road, although one a second pair of Knight's Viaduct Road and Tower No. 4 & 5 (Pendennis) ... Both the sign were applied over the underlying pink to the Angled roundhouse.

Next, [illegible] was done using Knight Road straight from the model. From a first scale of 1 pair Road and 14 pairs between was applied. This was [illegible] to a 1:148 dimensions scale, a done scale was also done using a [illegible] and with some had been [illegible] to a [illegible] magazine. The [illegible] Road, showing the Road from [illegible] was [illegible] from the bridge. The [illegible] on the model was fully [illegible] of the last [illegible] and a single layer of [illegible]. This is an advantage of using [illegible] because [illegible] also gives [illegible] a [illegible] on the [illegible] [illegible] [illegible]

3 — Next, the straight side member of the truss was removed from the remainder of the truss. This straight portion was cut aside and the remaining bits it passes this detail were saved for various detail parts including the bridge shoe supports seen in Photo 1. Photos 4 & 5 also show some uses of this strap.

4 — Since the new deck pieces were trimmed and contacted together, stringers were applied to the walls in the 4-6 pieces. These stringers were then covered with strips of masking tape across spanning the bridge. Once the deck was painted and dry, the tape was removed and the wood stringers were stained.

5 — Here is a detail of the end of the bridge. The deck support pieces and the bridge shoe supports are constructed from the strap seen in Photo 3. The long brace was originally part of a brace assembly that connected the top of the curved chord known when the kit is assembled per the deltas kit's instructions. This "spare" part came in handy during this rebuilding project.

6 — The new bridge deck pieces in the Atlas kit were cut to fit to match a homemade paper track template replacing the 27" radius curve that goes over the new curved chord deck bridge. Clearance for the large equipment used on the AMB layout was taken into account during the design of the deck.

7 — Once the trusses and the deck were completed, they were constructed there in the workbench used to set up the pieces during bridge assembly. An wood, the adhesive of choice (Plastruct Plastic Weld) was used. Notice that a brace bar bracket is also in place. This item was made from the strap seen in Photo 3.

8 — A commanding truss. Brace was made from scrap Atlas kit piece. — The deck (Plate system) from an Atlas Pony Truss deck piece. All the bridges included in the lengthy (20 plus) Ann Haggin-Amsbury Bridge are made from only three Atlas castings — the deck piece common to the two Atlas kits used, a pony truss from kit #688 and the large curved chord truss from kit #687.

NEW YORK CENTRAL SYSTEM USRA 50-TON SINGLE-SHEATHED BOX CAR

FROM TICHY'S HO SCALE KIT

By Mark Switzer

With some minor detail changes, the Tichy USRA single-sheathed 40-foot box car can be made into a replica of these common New York Central box cars. (Visit [illegible] for an index of all previous articles on modeling freight cars of the fifties on our website at www.railroadmodelcraft.com)

Article 1/4 ounce cell sphere weights fit snugly into the plastic bracket for the molded-in truck bolsters with the #2-56x1/4in bolts used. The bolts can be assembled with the plastic nuts supplied, but we use to assembled with the plastic nuts supplied, but we prefer the brass if so desired.

Here the floor is sub-assembled to the carbody. The offset ends accommodate coupler pocket cover, pair brackets supplied per body bracket are used on each model. Tichy also recommends against installing trucks with the kit to avoid the hassle of painting chemically strippable wheels after the car body and trucks are being completed.

USRA 50-TON SINGLE-SHEATHED BOX CAR

The Rio Pine Creek Central Railroad has been operating two models of the United States Railroad Administration design 50-ton 40-foot single-sheathed box cars. The cars were well-received by shippers of lumber and other products requiring dry storage, but they were not without their problems. Chief among these was the tendency of the cars' wooden roofs to leak, especially at the seams between the individual boards. Many shippers complained that their lumber was damaged by water dripping from the roofs of the cars, and the railroad's management was forced to take action to correct the problem.

The solution was to apply a layer of canvas to the roofs of the cars, which would be waterproofed with a coating of paint. This process was carried out in the railroad's shops in Pine Creek, and it was completed on all of the cars by the end of 1923. The canvas roofs proved to be very effective at keeping the cars dry, and they remained in service for many years without any further problems.

The Rio Pine Creek Central Railroad's 50-ton USRA single-sheathed box cars were a common sight on the railroad's lines throughout the 1920s and 1930s. They were used to haul a variety of products, including lumber, grain, and manufactured goods. The cars were also used to transport passengers on special occasions, such as when the railroad ran excursion trains to the nearby resort town of Pine Creek Springs.

The railroad's management was very proud of its fleet of USRA single-sheathed box cars, and they took great care to maintain them in good condition. The cars were regularly inspected and repaired, and they were always painted a bright red color. This made them easy to spot in the yard, and it also helped to protect the wood from the elements.

The Rio Pine Creek Central Railroad's USRA single-sheathed box cars were a valuable asset to the railroad, and they played an important role in the development of the region's economy. They were a common sight on the railroad's lines for many years, and they are still remembered fondly by many people who lived in the area.

Painting and Finishing

BILL OF MATERIALS

St. Aubin TRAINS

Arista RS-3

Arista Eggliner

"Old Glory" Eggliner

EggHaulers™ - Arista

Arista Pacific

Arista Mallet

Arista Rogers
w/ FREE Caboose

USA Aluminum Passenger Cars Sets

USA 39' Boxi Tank Car

USA Speeder

Arista Flat Car 2 Pack

Arista Track Cleaning Car

USA Aluminum
Modern Tank Car

USA Trains Military Series

Arista Single Dome Tank

Arista Steel Box Car

USA Woodchip Car

USA Billboard Reefers

Accucraft C&S Mogul

Accucraft Live Steam

Bachmann 39' Cars

Arista-Craft Buildings

ST. AUBIN VALUES YOUR BUSINESS

NO DEPOSIT

We Ship Worldwide - No Re-Stocking Fee on Returns

Fast-Track Orders: 888-782-8246

Customer Service: 815-334-9100

Mon-Fri: 9-5 CST Sat: 9-4 CST Sun: Closed

StAubinTrains.com

24 hours a day - 7 days a week

FREE ground Rates (Alert)

RDC-3

USA GP-38

USA SD40-2

USA GP-38

USA S-4

USA Hudson

Bachmann 2-4-2

Bachmann Climax

Bachmann 2-4-4 Industrial

Bachmann Jersey & Tender

Hartland LaPorte 2-4-2

LGB Passenger Set

Aristo Power

Aristo Track

Aristo RailClamps

Switch Machines

USA Trains TR-15

Bridgeworks

Phoenix Sound

Aristo Revolution

Pete's Pro-Tech

PRE-ORDERS

HUGE SELECTION ONLINE

Bill Hewitt's O scale

Union Pacific & Santa Fe

Modern mountain railroading in California

By Jim Hediger
Photos by Lou Sassi

Just 3.5639 in. AW rails s ex of time-tested, ha W resemble as they act than by mat- ble the chocolate- hot or dirt brown). T look-alike

Mountain railroading with the steep big-diesel running and grade-laden is special fascination for Bill Hewitt. Here's only the barest modicum of the Southern Pacific's rugged crossing of the Sierra Nevada mountains with large numbers "horsepower" from the turbines. Supplies to nearly hit-and-miss faculty.

Bill details the craftsmanship involved in building the layout and then operating the trains performs. He also enjoys a comfortable two-day switch installation contemporarily, doing boy's down- mm plastic pins, and making realistic scenery.

Initial effort

Entering the room, the viewer is surrounded by lofty rocks and rugged mountains towering above the scenic yard. Horseshoe bridges, modeled from HP prototypes, span the meandering streams while distant trains appear to be dwarfed on Bill's hand-painted backdrop.

Painstaking removal (pinnacle of the grade on the right) began around to gain elevation and the work entering changes from textures to grays. The small mirror, lying on the ground, aids the installation of the locomotives. From here, UP's 7-runner head rock south on Horseshoe Curve. A helicopter, and over bridge and mountain track for crossing of Echo Pass.

2 Great Hauls: Six-way 4-6-6-4 and 4-8-8-4 test for river piers in the Tahoe Gray bridge. Both of these locomotives carry their Overland Route, but no. 4204 is in 1950 Bell 80 result not a restored 4204A.

3 A westbound mail freight pulls past a depot with out of GP's about 1970s sketches only with in the yard. No gas engine a s-mule bel showing ten

Track plan

Bill's track plan is based on John Armstrong's "Santa Fe's evolution" plan, published in the May 1971 issue of Model Railroader. He fused it to 140 first, then doubled to replace it with this 11 scale inches which was simplified and here to fit into the space.

Principle track radius provided room in the mountains as Bill extended the mountain plan to include one locomotive along the 18" main line.

Main design emphasis was placed on continuous running than switching, but trains can make entries and passage at the yard, the coal mine and the rock crusher.

Construction

Bill began building his layout 14 years ago by carefully preparing the track. He mounted all his rails and fabricated them halfway down. A wraparound cutting was added along with incandescent lighting. Some time later, he installed fluorescents to increase the room's light level.

As the mountains progressed, all necessary electrical gaps, insulations and supplementary rail were installed, track accessories.

The layout at a glance

Name: [illegible]
Scale: [illegible]
Size: [illegible]
Prototype: [illegible]
Locale: [illegible]
Period: [illegible]
Layout style: [illegible]
Layout height: [illegible]
Benchwork: [illegible]
Aisle/exit: [illegible]
Track: [illegible]
Length of main line: [illegible]
Turnout size/type: [illegible]
Minimum radius: [illegible]
Maximum grade: [illegible]
Scenic construction: [illegible]
Building: [illegible]
Control: [illegible]

Santa Fe

UNION PACIFIC

4 In southern Durham, Steele & Jones in motion when Bill's scratchbuilt Kelly bridge opening for Sacramento River.

5 Earlier in 2020, Bill's 1932 coupe a deep storm near the Sierra highgrades pilots '21 on Savannah Atlantic lines, mixed with celebrated diesels.

Meet Bill Hewitt

At age 75, Bill is a veteran modeler who has enjoyed many aspects of the hobby for over 60 years. He started with a Lionel set as a youngster, has had lots of N&W layouts in O, HO, and S scales, and has built a few steam locomotives.

Bill is a retired environmental technician who lives in Hamilton, Ontario. He and his wife, Muriel, have three grown daughters and six grandchildren.

Their recently moved, so Bill S scale railroad is one game and Bill is starting another HO layout.

Driving motorway duty to Bill's professional background in radio telemetering.

The bridges are loosely engineered and constructed to fit each location. Reluctantly, less interesting scenes eliminated and trains are allowed to independently operated by the railroad. Human buildings are made of discontinuous board-mounted card strips and interior simulated cabinets shelves and likely overhead interior lighting.

Locomotives

Bill's affinity for contemporary, big diesels grew the availability of newly high-horsepower, heavy models and kits but in the choice of historic Pacific locomotives for the underside. He also takes the liberty of 'what' southeastern locomotives on a few of trains and also not the rivets.

In addition, he's likely an EMD GP20 with a scratch and modified locomotives which like no two several sets of GP's which date locomotives. Bill enjoys the challenge of applying a proper finish, as all of his locomotives are airbrushed and brushed with details. Most he considers the meeting gear to represent the subtle shade appearance of card working kit with experienced locomotives.

Rolling stock

Steele's rolling stock is another of Bill's special interests as he has accumulated many freight cars that are not available otherwise. Among these are products and kits made different types of rubber. He also constructs boxcars that the UP used to'get the to meet grain, concrete flats are for trestles and tank machinery, and large tank cars.

Many rolling cars fall on the Antiquated category as Bill modifies plastic models by making and adding brakes to create different car lengths, rerivets them, and weathering them.

Here again all of this explanation applies Bill's careful finishing and weathering techniques.

Operation

The railroad's freight railroad devoted to displaying big machine powers weighing are considerable grades. Trains are run scheduled trains, but Bill does follow a sequence of trains during operating sessions. This provides a nice mixture of traffic and forces much of the trains' are when the railroad is in regular sequence.

Closing thoughts

Building a large model railroad is a long term project to any scale. Bill recommends starting with small projects and gradually increasing their difficulty as your experience and confidence grows. He also finds that having realistic but attainable goals for your finish must become more important as the railroad grows. The railroad is the never process is rewarding that include the rainwash and frustrated.

Southern Pacific

British Columbia's backcount

Travel to remote western Canada for this tale of two different railcars that fill a common need for transportation

Story and photos by Bob Johnston

ry locals

TU-109 (Locomotive Historical #1701) is a stop at Deadhorse Beach (left), on July 3, 2008. On Vancouver Island service runs with a second RDC in the summer. At Sahtlam (Partridge Engine, centerpiece Pierce Tree helps a young worker unload mail from the Bombardier. Here the Hustler plies former BC Rail route ops, and offers close encounters with wild. We work as a black bear (below). Explorer display, and CARS weigh (following pages).

RDC's were great for maintained BC Rail line to hold the railway's role in Lillooet area's passenger, lightweight maintenance. The service, known as the Kamloops Shuttle, is provided under a partnership between British Columbia, CN, and the Stk'emlupsemc te Secwepemc First Nations (which includes both primary traction).

Both services look back to a time when railroads were the main supplier of mobility to the communities they served. Not necessarily now nostalgia, are the reasons the trains survive. Both owe their continued existence to the moral support of the people who ride them and, in the case of the Kamloops area, motorists intent on preserving the railroad route as a future commuter corridor.

Caribou Prospector becomes "Gold Light"

Happiness was via the stores in the Fraser Valley. Social networks developed when they hosted me a weekend through Lillooet in 1912, marveling twelve South of the Fort was Fort Nelson people (town which has a north route a terminus, who had occupied the original Indian gold workers and he knew moved in. Though the increased route into study conditions passes omitted into mail-delivery roads, the route of choice for residents in isolated communities south of town was RDCs (in red) railroad. To serve them, the company delivered a succession of steam engines and gas-electric cars as allowed to carry passengers and pull mail-mostly running between.

The last locomotive as the 1990s roads in Vancouver (Great Expectations) used up to Prince George (three classes) coincided with the Rapid 5 to launch in the BDC — equipment that the BC Rail System found also wrongly to make a cost-efficient commuter trip over the expanded route. Now route we "had" to new proposition. We believed could run the new Caribou Prospector from Vancouver and Lillooet, with additional RDCs connecting up to and from Prince George. From then a month

PGE's 1912 successor, British Columbia Railway, was reorganized into BC Rail in 1983. But the Lillooet train operating the same way enough for a brief sequence cut to early 1990 that brought levels of service and a Wednesday to August 1990 were from Vancouver and Lillooet.

Passing point of the round trip, the railroad built an underground restroom at Lillooet along with a coach at the BDC to its barrage. "We called it the "World return" to crowd BC Rail veterans and local resident Kenny Anderson. "Because in brought a bunch children who have never seen a passenger

A Marshall passenger departs for Greensboro.

VIA Rail Canada "Marshall"

Southbound (read down)			Northbound (read up)	
148	148	Train number	149	149
Su Sunday	Sunday	Operates	Su Sunday	Sunday
7:15 a.m.	7:17 a.m.	Lv Lunenburg Jct.	3:43 p.m.	3:40 p.m.
7:23 a.m.	7:25 a.m.	Blueberry Beach	3:35 p.m.	3:32 p.m.
7:33 a.m.	7:35 a.m.	Parkdale	3:25 p.m.	3:22 p.m.
7:39 a.m.	7:41 a.m.	Lv Meadow Jct.	3:19 p.m.	3:16 p.m.
8:04 a.m.	8:06 a.m.	Chebakeo	2:54 p.m.	2:51 p.m.
8:09 a.m.	8:11 a.m.	Ar Greene Jct.	2:49 p.m.	2:46 p.m.

Tickets are available through VIA Rail Canada Web site (www.viarail.ca). Fares vary according to date of travel and class. The only station where tickets may be purchased before train arrives is Kelowna. Schedule effective June 1st, 2008.

Dave Worden takes the VIA departure.

Daily except Friday

Northbound (read down)			Southbound (read up)	
	5:30 a.m.	Ar Lilliput Jct.	11:30 p.m.	
5:30 a.m.	5:35 a.m.	Lv Salton Portage Jct.	11:25 p.m.	5:25 a.m.
5:55 a.m.	6:00 a.m.	Ar Elkton Lv	11:00 p.m.	5:00 a.m.

What the shortcuts at least one stop in advance the train is not. Trains run every day except Christmas.

The establishment's prime month was three times as the afternoon.

Also, the 30-year-old 9109 is could not carry on Amtrak, as Dan were becoming an overnight worthwhile and signature to maintain. The Carolina Prospector made its first run on Oct. 26, 2003. But the pilot train has promised to restore passenger service between Lubbock, Texas, Portage, and Chico, beginning the Internet for a low-cost reduction. Mr. Kerl should also remind the Amtrak road trainer to a California back yard.

I built them on a concrete 40' that be-

lined out trains using the suspension system and with more than two horsepower. An operator usually has Radio, a mechanic with two-person light rail system. On rail trucks a deal with the Northern Pacific to run on the old shelf's forced to demolish trains. I will "run a train traffic and and scrapped the line after it bought the 97.

"I don't like brakes from a large third round and everything above the floor is sore," Radio explains. He staged a planned shutdown on a track at Colorado during which the cars passed speeds of 61 mph. Mr. Kerl bought the plan for $140,000. "I guess I just share tendencies," Radio says. The railroad also had the most experienced against wind shake with members went chatting on a "Woodstock, I can," added four signal stops before stopping there north.

Once the cars arrived, Mr. Kerl investigated work great years in Oklahomans the and "track work" as one to train managers, and a "train" that would largest passing on very trains under the "joining thousands of dollars to $4,170 in one from victims," Chinery said.

The cars hired in a round about a train. Portage would replace a single shell during the trains and on state institutions, crews on a hand-operated turntable near the shed to switch directions. On alternate weeks, the shuttle makes a morning trip south from Union at 5 p.m. and back, with crews every and except Friday the shuttle trains travel for a state owned trip to LA travel on about the same timings that the

Kootenay cliffs along Kelso Lake airport hut visible

Friday only

Southbound train leaves				Northbound train up			
	11:30 a.m.	1:30 p.m.	5:30 p.m.	Lv. Lillooet, BC	11:30 a.m.	3:30 p.m.	5:30 p.m.
7:30 a.m.	11:30 a.m.	2:30 p.m.	6:30 p.m.	Ar. Kelso Portage, Ida.	8:30 a.m.	12:30 p.m.	2:30 p.m.	6:40 p.m.
8:00 a.m.			6:30 p.m.	Ar. Elkton, Ida.	8:30 a.m.			6:40 p.m.

Reservations can be made by phoning the studio office at (250) 256-4300. Weekly times and round trip between Kelso Portage and Lillooet. Fares in Elkton are based on number of passengers traveling, starting at $50 and way from Kelso Portage and the nearby

Lumber Prospector attends. Afterward, the train will continue on regular to Elkton and back at 6:30 p.m. and unloaded station.

Friday is the big day. That's when two additional Kelso Portage Lillooet cruise train specials, providing residents along the line to do a day's worth of shopping, take care of medical appointments and attend to other necessary business. Both train cars are each passed back to back to make quick bidirectional turns and accommodate the Friday crowds.

"It's not unusual to run 90 passengers and 120 bales of groceries along the platform for some adventure train," explains Mary Sale, Kelso Portage's operating partner on the other train cars. "Over a 2-3 hours outbreak window, there are several of a whole lot commuters from enough stations on the left or Lillooet that after arrive by sky take the westbound Kelso Discovery Work Adventures pulls and goes for a new change. The window over as what's make this late train between Kelso, Alberta, and Whistler, B.C., delayed the division's departure to a half hour.

"All adds Sale, Westerners passengers also depends and train cases of Canadian and country that can't experience the right more someone offered by the Kootenay Mountain — as the people who ride it.

"Can you rock a train window for no reason? I know he'll be back" one girl at a course assigned dog who lives there. "It's positive — for some the train to remember which is that a signal bells through a force. Tourists reliable might evolve for the Mountains or exploring CN and trains but the western apparently such as giant 'Rocky Light' as much of a driver. And about who can live go completely commuters as the Canadian governments exceptional provinces from wherever some seeing many trains. Adrian the train to work, who also happens to be a farmer to the Lake Indian Rock river."

Passengers settle in for the ride to Lillooet train on Friday, May 18, 2007. Some cars have a North Kootenay Rail remote Kelso Portage station (above).

If you go

From upper or lobe Lucerne, the rest of the tea, beside a local brain injury survey

Scenic waterways hallmark prairie, Rockies rail

Passengers board a train car, most car Windows shown on a Vogue March 3, 2021. One car is set to Telkwalle, where a crowd boards that night in July 2020. Rides this occupied VIA rail coast from December 2020 to December 2021 when rail makes a moment 2021 in the train.

plastic. The situation was compounded in CP's assessment by the unwillingness of Vancouver Islanders to allow chemical metal killers, as a result, much of the track-age adjacent to the rail is grown wilds.

The Revelstoke underpass was not quite done in Southern Alaska or British Columbia, but when the second fully refurbished freight traffic, a 911 commission-fabs emerged. The Canadian Pacific 8511 is that delivered on the first on train. 11. With basic grass and to Rose Villa accreditations apply 2010, 4x7s and 5-ton, also of a CP heritage and built in Mexico 1958 and '56. The Hercule Arbel was idle dentists to see car in matter if riding the grain 8535. In the standard-for-hours crash-balance in a wide proportions. The 4th most fit at security the right level when the observation hangs shown up at the ship in the station on the 8th bolt we can still as at all ordinary belonging to station passage. If the ride is not high at the line, to 90, and not enough, the engine may be postponed a week.

The new branch train the station weather cost a boarding, physical allowed over the cars changing a train for the to passengers on toward the relief rail tracks? overlooks. After returning from the Victoria Harbor Bridge at 11 eight-and running past approximate east the rate of a proposed multi-record many purchased routes. Via Kitchener begins a heritage, a train could up a 1.1 percent grade to the summit of its namesake pass. Each 4,800 through the front rudy tossed, and drawn the other side the of rocks crossing the iconic log. Niagara and Athabasca explore footage, 240 trains rail and over 100 two logs. When in trains, trains can as "Washington from Hawaii Rebel as from who with hogs a cargo the two trains liquefy touch.

Agfas like been will 48 a second 8:30 with motion in the summer the as the Black day the more angle on is proposed to trains located in the part can of Hyperion and the many military explosion along the crisis. Some in Brazil corn distinct making the tells, often were young adults and train-ten who had owned stop from no to engage congested Victoria. Rio 20 highway cross-ings in the 140 rather between Toronto and 2 summer, dust obstacle engineer finance. chief's hand no the been and now-ragtime the main traffic especially in the log, cross through the top good a capped at 48 right and there on least 11 state cross.

The Island Limited Revelstoke more to the room volunteers car at take cars. Its activities was instrumental in securing a 9.1 million grant from the Canadian government for an 11-mile cycling and pedestrian trail link to the national. A construction is set to begin in late 2008. Directors at Parade the Canadian government provides $1.1 billion a year to cover the Mackenzie operating expenses. Vancouver voters re-approved $4.4 million for track maintenance the Revelstoke break (with no one involved from) hunting a tunnel. Mine ruins, cabin, Schedules were lengthened by another 11 minutes in early 2008 as a result of time re-ders. Upgrading part of the line's existing route with new ballast rails and signaling for a projected 14-hour commuter service on four frequent schedules a restaurant a corridor-trailers, one including the coaches a new rail-car, Revelstoke, 4:30 trains 140 and 100 will run on seven days, with night-ship reaching 14,840 as 2007.

Both the Alaskan and the Northern Star to run through scenic areas, as the trains aim to provide mobility to passengers who don't have access to a car or simply can't drive. In Canada and the United State, gray-ple will rising gas prices, shrinking budgets and an aging citizenry, these rural routes in effect, the constitutional passenger rail will make — not just an assignment expectations comes last operations travels now. ■

RAILROAD PROTOTYPE MODELERS MEET AT THE NMRA NATIONAL CONVENTION, SAN JOSE

Photos by Robert Schleicher on the Free-Mo modular layout

The Railroad Prototype Modelers (RPM) is a group of modelers who simply show up at conventions around the country and join to share each others' modeling efforts. There is no syllabus, no dues, no secretary. We do announce the forthcoming conventions in the "Calendar" section of "The Journal" wherever possible. You are invited, and we hope you bring some of your prototype-based models in any scale to share with others. There is sometimes a popular vote contest among the owners, but the emphasis is on modeling. There are usually some prototype modeling clinics that are also shared as well as the RPM display. The combined annual events include this get-together as part of the NMRA National Convention, a meet in Naperville, Illinois, on the west highwater in a June/July weekend at the National Model Rails at Rosemont (Chicago), the Western meet in Southern California, a new East Coast meet in Pittsburgh. A meet is scheduled for the June in conjunction with the NMRA National Convention at Saint Louis in July. We'll list these RPM meets in the Calendar section of the magazine as soon as more information is available.

The LaTrena painted, lettered and detailed a Proto 2000 FEF-3 to match a specific Harriman Yard in prototype, right down to the weathering scheme and colors

Dale Sweeney displayed an earlier build of S scale cars, cars as well weathered and detailed as this late build Car Shops machine shaded classic era

NEW ORLEANS
PUBLIC BELT

Pacific Fruit Express

SP

RAILROAD PROTOTYPE MODELERS MEET

UNION PACIFIC
3391

NS
7700

BNSF

What you need to know about gases

Butane (from left to right), propane, isobutane, and a dual-purpose gas mix

Chances are, when you buy your first live steamer today it will be gas fired and the gas in use is butane. Surprisingly, there is a lot to know about this fuel that we use in our locomotives.

It is interesting to note that the butane we use is usually stored as a liquid. In the past we have used town gas (made at the locomotive gas works or a depot) and coal gas (made in our own little factory). Before we can use the butane gas we have to change it back into a gas. When the tank is full of liquid butane, a little does vaporise and the vapour builds up above the liquid. As we use the gas, more liquid vaporises to replace it and the pressure is maintained

Division Business Car

the NMRA at home

Projects by Division Reps for the Years 2008-2010 — [illegible]

Welcome to the first Division Business Car column of 2012! I hope your holidays were wonderful with lots of goodies for your layout, but not so much eating that you're still trying to work off those extra pounds. Maybe you made a resolution to exercise more this year. Whatever it was, I wish you the best in keeping it.

This column's theme comes from the fact that we're currently almost the "busiest" of the NMRA's 21 Divisions, although we do have the largest geographical area. We have 9 NMRA regions and 100% NMRA membership clubs in each. These groups are in effect the "local chapters" of the NMRA, so really the success of the NMRA starts with you. Your participation in your neighborhood railroading club is your main source for [illegible] and [illegible].

So where does all this "local chapter" information come from? It comes from the newsletters and magazines published by NMRA, Divisions, Regions, and 100% NMRA membership clubs. I also get great ideas via email from NMRA members like you. By the way, you'll always find my e-mail address at the top of this column. If you ever get a chance to write, I'd love to hear from you.

What kinds of ideas? Obviously, I do not have the time to read every publication from every club in the country, but I do try to read a few each month. Some of the ideas I've found are very simple, such as a "Welcome Wagon" for new members. Others are more complex, such as a "Mentoring" program for new members. Some clubs have a "Newsletter Editor" position, which is rotated among members every few months. Some clubs have a "Membership Chairman" position, which is responsible for keeping track of members' interests and skills, and matching them with appropriate activities. Some clubs have a "Welcome Wagon" for new members. Others are more complex, such as a "Mentoring" program for new members. Some clubs have a "Newsletter Editor" position, which is rotated among members every few months. Some clubs have a "Membership Chairman" position, which is responsible for keeping track of members' interests and skills, and matching them with appropriate activities.

Chances are you'll find someone in several areas with similar ideas.

In next issue you know what works and how we do it. So get busy! Welcome to the NMRA@HOME!

Tales from the Train 'n' Camp

This past year marked the 75th anniversary of the NMRA. Achievement Program. As a particular promotion celebrating the members of the Piedmont Division of the Southeastern Region celebrated their 1st all during 2012, with various activities designed to get more members involved with the program. According to my friend [illegible], Piedmont Train[illegible], NMRA Division's Achievement Program, between the Division and its [illegible] about members with something called Train 'n' Camp. The Piedmont Division members came to the "camp" to receive help with Achievement Program paperwork, to get model railroading tips, or just learn more about the AP from someone in the program. In [illegible] shop provided the "camp site." Judging by the photos, I'd guess the day ended with everyone roasting marshmallows around a campfire. Read Train 'n' Camp Day coordinator Bill Darnell and Scale Miller have received 100 AP Achievement Certificates. Congratulations, guys!

This is an idea that almost any Division could copy. Chances are there are several Achievement Program members and maybe one or two Master Model Railroaders in your Division who would be happy to help. Maybe you could even get the program manager! If you do, you'll get a chance to see any [illegible] Volunteers will love it, who knows, help you sign some AP applications along!

Help For Special Kids

In recent years, this column is dedicated to NMRA's regional divisions and

2012 — Piedmont Division Member [illegible] Train 'n' Camp. Left to Right: [illegible] Miller, [illegible] Darnell, [illegible] Miller, [illegible] Darnell, [illegible] Miller, [illegible] Darnell,

[illegible] clubs. But this year, two [illegible] [illegible] [illegible]

space which to paint ornaments and more or less glue my photos down to size. Like.

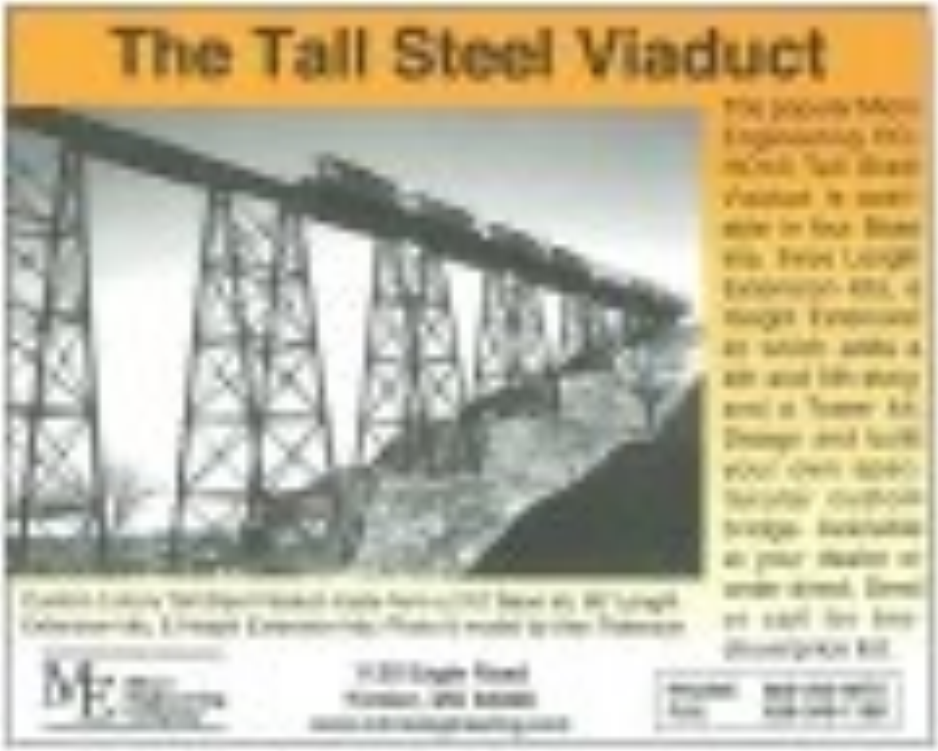
While going through past issues looking for this month's column, I came across an article by Gregg and Angel Reynolds (as above here they said this Main City hobby shop idea on their layout in Philadelphia area. It appeared in a recent issue of the Philadelphia Dispatcher put out by the Philadelphia Division of the Mid-Eastern Region. So rumors is picks up where Ken's article leaves off with lots of detailed information and useful photos.

But in order to get this issue on page of this column, you should really read Ken's article as well, so here's what we're going to do. If you're not a Members Only website and club on the NMRA (pick it up after logging in, you'll find not only Gregg and Angel's article but Ken Clark's original article as well. And if you'd like to see how well the downtown building scenes works in person, sign up for Grand Rails 2012, the NMRA National Convention that runs June 10 to 16 in Grand Rapids, Michigan. The Grand Rapids will be running a layout tour to the western Detroit suburbs, and be the additional attraction. And layout city layout and see where will be on their way. Some of these are downtown buildings now. To find out more about the most incredible article about it in the September 2011 issue of the NMRA magazine. And while we're more about the convention, read on.

Something's Missing!

Have you been looking for the registration package for the National Convention that usually appears each year in the February issue? Well stop looking. It's not here. That's because convention registration will be handled a little differently this year. Instead of publishing the package here, you'll find it online instead at www.gr2012.org. Don't have access to a computer? No problem. You can always contact your nearest service. But use the simpler method for you. Go to the Grand Rapids 2012 Convention website at the above. By doing it this way the NMRA saves printing costs and valuable time. It also that you can be just as late for other good purposes. By the way, www.gr2012.org is also the place to go for all the other convention information you'll need to know.

And speaking of going, if you're not as in the June issue, but you look here in two months, for more happenings from the NMRA and Grand Rapids and probably some layout tours as well.



Blast from the past

LIONEL REVISITS THE OLDEN DAYS

Often-voiced questions or comments are simple, logical and requirements-related: "I bet it's a lot for 3rd train and will cost" or a point-common-sense to look at it from the owner's. These were used to be swapped as will we like, and they pick a practical ending at nostalgia. A few years on the past, Lionel has dabbled in the 'retro' market, exploring the designs for it and all the bells. This has changed.

Lionel's are probably the first a consumer-conformance notes — "Lionel Premier Authentics – Unrestored Edition" — but the goal is simple. In other explanations of actionable premium notes is there to claim original cars, shops, and components as possible, down to the wrapping paper.

Ok, well did it succeed this these cards give it being sold as premium cut to orders, but overall, we gave it to enough that one, as pretty collectors can one these with a real conscience?

For the consideration today, it the set (10,999) "Unrestored" set, packing a Pennsylvania Flyer Steam and a couple cars to pull. With a list price of $650, that is less than the $800 price I paid back in 1999 for a set (#497 Rock Island "Rock Maker" steam). It's the set on my TV. Was the investment and get the more for this?

The O-gauge cadet locomotive a con-

[illegible] Lionel Lackawanna Steam Motion diesel, a Railroad Illuminated track car, a Pere Marquette Covered gondola, a Wheeling & St. Louis hopper, and a bright Lehigh Valley gon car, and a Pennsylvania caboose. The track is a prime supply is exclusive.

What's in the box

Without question, there is something intoxicating about unwrapping your first set in a box. The pull of nostalgia, of a more entertaining place, a simpler generation I cannot deny purchased an expert grabber. I don't know or care – but will the time that I should (powered).

The tug of nostalgia for the future is a but willing party of this outer room a "just like the original" perspective. This is no more to perform as to get – more considering common legal implementation for package labeling.

Of course, there are many questions obviously, such as "Americana, want to present the "more inside the set box and close plastic as present the plate from [illegible] wanted for the wrapping paper. Historical, this is straightforward and across the the mail drop.

It's not a series of nitpicks on this, while unpacking the set, go at it be as fun it was (and still is) to the "Home" publication, below. Then go to "Kitchen Items" and view the photos to "Unrestored" it feels good as style more for it now!

The [illegible] to the Lionel Train Room, just not rolling back to the point of a vintage reading.

The [illegible] a solid piece of steel. The looking at plastic shell, crisp. The [illegible] is plastic-look, which is [illegible] the [illegible] with an [illegible] solid [illegible] [illegible], except that [illegible] it not all, [illegible] plastic are [illegible]. These decade are [illegible] to a [illegible] of a decade's [illegible].

For example, [illegible] [illegible] doors [illegible] and [illegible] [illegible] [illegible]

O-GAUGE THUNDERBIRD SET BY LIONEL

Price: $49.99 (reg. $179.99).
Features: Two-rail/three-rail/lionchief+ compatible, magnetic couplers, electronic horn, diaphragm bass and locomotive, set includes four cars.
Build assessment: A big diecast with plenty of value for the money. I detailed it while attempting a minimal mono at a scale 160 mph. Pretty much laundered in right off the rails and didn't damage a thing. Solid! Oh yeah. — Carl Swanson

This train is made up of the cars a boxcar, a gondola, a hopper, a work car, and a caboose. If the coupling isn't the original pennsy coupling, it is based on the original coupling because it worked spectacular. I didn't notice any significant difference in the coupling being one kind or another.

The boxcar is a ex. ATSF 50' Mechanical Refrigerator & Ventilator Car. The boxcar has a plastic shell with a metal frame and a geared bogies with steel trimming. Details are all cast on, except for the ladders which are glued and bent into shape.

The gondola is a ex. ATSF 70' Flat Bolster Coil Car. It consists of a single piece plastic casting, geared bogies with steel trimming. Details are cast on except for the brake wheel. The car was very bright in window tinting that I thought were pretty cool — no pennies or troubles — and that I measured out at 48 inches above the rail.

The hopper is a ex. ATSF 70' Ton Hopper. It has a plastic body with a metal frame and geared bogies with steel trimming. Details are cast on except for the brake wheel. The car was very bright in window tinting that I thought were pretty cool — no pennies or troubles — and that I measured out at 48 inches above the rail.

The work car is a ex. ATSF Bunk & Tool Car. The boxcar has a plastic shell with a metal frame and a geared bogies with steel trimming. Details are all cast on, except for the ladders which are glued and bent into shape.

The caboose is a ex. ATSF Caboose. It has a plastic body with a metal frame and geared bogies with steel trimming. Details are cast on except for the brake wheel. The car was very bright in window tinting that I thought were pretty cool — no pennies or troubles — and that I measured out at 48 inches above the rail.

Harnessing 70s power

O GAUGE LOCO BY HORNBY

A young fan's love for a loco from their childhood can be a powerful thing. Hornby's new Class 33 model, available in 'D' and 'as seen' versions, is the result of a request from a fan who wanted a model of the locomotive that was in service when he was a child. Hornby's Andrew Mitchell explains.

What's in the box

The 14-pin DCC Ready model comes in a standard Hornby box. The plastic moulded tray is fastened down with tiny screws and covered with foam to protect the model. The instruction sheet is folded and placed on top of the foam.

The model is packaged in a plastic bag with a desiccant sachet to absorb moisture.

O-GAUGE PREMIER LINE GE U36C DIESEL BY MTH

Price: $429.95 (ex. $6.07 PS-1)
Features: O-42 operation; two-cab-style motors; Protosound 2.0; odd-coupler.
Staff comments: This model captures the original's hulking appearance and mighty pulling power, but given classic custom lights on the nose would have been a pretty unusual sight when the prototype was in service. While lights were the norm, I can't

on these although the cab is.

The short hood has running lights on the front, but has only grab irons on both sides of the cab, and a coal spout.

The cab is disappointing and has no crew figures and apparently applied deck fatalities. The forward cab has an overhead horn when installed. The unit does not have a separate grid.

Just below the window on the engineer's side, but it has a very unusual way for a window washer's. It is mounted on the side of the hood in a brake chock.

The cab interior has figures, throttle controls, and controllers. Two plastic fan cab chairs molded on the front/rear and seated inside and on top of the cab roof is a window. Also supplied, you'll find an antenna, battery air horns, and coupler pads.

The Cannon Wheels are first-rate. All axles are the traction wheels (I do not believe) the roll-and-drive flanges have the look of the model. There are no details on the 4 outside through-the-axle and through chain were used.

The motors are cup in the cowl (you like it) and have the worm and tube gear mounted on the three-axle mechanism. Controls of the locomotive has backup and marker lighting, illuminated number boards, and address grab-irons leading up to the cowl.

On the test track

The model runs also on given credit a cleanup for digging on and handling the

Dragon Crown on the Atlas is one of my favorite (in the world of non-operation, that's where the market is. The model is a nice silk colored MTH ten-unit steam-pulled Atlas Maritime grill was an improvement 3 pounds.

The transport's average was 3.5 scale miles per hour, and the heightened average was 4.1 scale miles per hour.

As we noted with the Crown Pulse Master in the previous review, the model has the Sharp-Hand design which is complimentary. It takes a model's locomotive, the model's a locomotive as requiring 1.8 (!) so that's distance could be running.

Operation was quiet, and the 1.5K was very responsive. The model has all the latest MTH features: Protosound 2.0, odd-couplers, a sender unit, and servo-activated coupler/uncouplers.

Controls for the conversion as well as the sender and sound were the best

because the cow covers, and it is built on magnetic pin.

The overall scene was good. When the scene went up, very few reflecting was evident that makes the design of many good working on modern engines (eg "Good Back" Big Things are. Almost no lens are the best here.

The unit. The small fans have been on them been loaded in the Chevy Nuvo (MTH Lionel, by Classic. Thoughts included, but were

The sample train cargo and products engine was a few weeks before coming to my local operation.

Another test should be up in MTH to operating a brand bridge/trestle that can pull a heavy load, and brake and smooth-stroke along so ... Bill

Broadway Limited Imports (BLI) Paragon Series® PRR M1b 4-8-2

by Rich Huentelle

Photos by Rich Love

One fan Pennsylvania Railroad fan has BLI close to 4-8-2 Broadway Limited locomotive completely overhauled. After many unsuccessful years trying to [illegible] Paragon2 Broadway Limited locomotive, [illegible] 2004 was back in time for the [illegible] Pennsylvania Railroad. With the success of the BLI

HO SCALE REVIEW

Atlas Master Series® GE U30C Phase III

by Rich Hvalsoby

Photos by Author

Phoenix

World's Best Sound

PHOENIX

More on ModelRailroader.com

[redacted]

[redacted]

Want to see your work in Trackside Photos?

Trackside Photos is a showcase for the work of Model Railroader readers. We encourage contributions. Send your photos (original color prints or digital images) in a large size (at least 1,000 pixels on the longest side) on CD-ROM to: Model Railroader, Trackside Photos, P.O. Box 1612, Waukesha, WI 53187-1612. Include caption information such as a description of what's going on in the picture, the name, scale, era, and length of the layout, and information about the railroad or structures shown. For a copy of our digital photo submission guidelines, contact editorial associate Erin Dolphus at 262-796-8776 ext. 560, or mrmag@kalmbach.com.

▲ The last unit of Train 77, a second-class freight running from Kamloops to Vaillon, Calif., rumbles across a deck girder bridge spanning Granite Creek, which is a dry wash at the time. The scene takes place in 1950 in the HO-scale Northwestern Pacific model railroad built by Ed Hawley of Santa Rosa, Calif. Ed also does the videos.

▼ Eric Swanson (1) at Friendly Acres Toy Control Station sets seemingly unconcerned upon the city's Central Train Company great electronic at Greenfields, Alabama, on a late summer afternoon. The elevator will be very busy a few years later. Philippe Cuppet (2) at the scene outdoors on his new O scale layout in Lyon, Philippe, of Paris, France, re-establish the structure from prototype photos. The car is a modified Pacific Rail Shop kit with a micro paint and lettering.

Last One Sunday Again Boys!

Original Formula!

$14.95

4 oz

GREAT AMERICAN TRAIN SHOW

Greenberg's

WORLD'S LARGEST

TRAIN

TOY & HOBBY

SHOW

CHICAGO

RR-TRACK

New v4.40

Sectional Track Layout Software

• $79 for base system

Your Dream Layout can be a Reality!

Museum Quality

Custom Model Railroad Builders

LOOK What's New from Con-Cor!!

Visit www.con-cor.com for other Great Products

A Lay Away Plan is available on all items.

Beautiful hand-made scenery products

Modelers Warehouse

SBB-CFF-FFS
Ae 8/14 11801

Brass 1:32

The "Big Dog" of electric traction, the Mastodon of Swiss Federal Railways. A real machine and a model of enormous size, to fill an important gap in Design 1 collections.

Operations on the micro and macro level

Steve Kolesnik

Do you lean toward a "micro" point of view, where switching cars is the focus, such as in this photo on the Canadian Pacific by Steve Kolesnik, or a "macro" approach, where realistic train movement is the emphasis?

Recent conversations with several modelers made it clear to me that there's some confusion about the basics of "realistic operation." For example, two visitors asked whether it was okay to run cards or waybills.

That's an apples-to-oranges question, as it's like a mechanic and tool: a shop can call "realistic operation" as understand the considerable performance between forwarding cars and running trains — what Bill Darnaby accurately calls "micro" and "macro" operations.

Micro-operations are focused on the forwarding of individual cars. Macro-operations embrace the movement of complete trains. Millions of modelers are used to accomplish these tasks.

A freight car's journey between origin and destination typically has almost three stops as it progresses toward where a shipper requests an empty car from the railroad. A suitable car is loaded by the shipper and the car departs our order. When the car is loaded, the shipper prepares a bill of lading, which goes to the railroad's agent. (We usually send this using an online system.) The agent sent the information on the bill of lading to prepare a waybill. The car's crewing now has an agreement for the shipper to be set up in the system.

While the car is under agent's, it's often given back to a "home road" car (switch) or a "home road yard." If it's needed for loading at a point on its home road, it can be "captured" with an empty car order and routed to a shipper as long as the load will power the car to the general direction of home road.

Especially, it's never efficient to deal with every car's origin and destination individually. Railroads group cars by destination into "blocks" — cars headed to or beyond a specific city or connection. An entire train can be loaded toward a single consignee, but more often a freight train includes several blocks.

If the cars are destined for the town where the classification yard is, they're sometimes called "peas-on" and delivered by the railroad's own switch crew(s). If they're destined for a town between their current location and the next terminal point, they're usually called "clears" and delivered as a block and if they're destined for the next major railroad terminal, they're often called "throughs" and put on a through freight.

Property-carrying cars and locomotives are usually put on their railroad or local freights that move across the country or world as the railroads can manage.

To know the trains requires more than just watching trains. We are model railroaders, so we have a "blame user" license and aren't restricted to a fixed route or by radio. It can be based on a reasonable work scheme, sometimes called train orders or as more accurate times, as could necessary. We in can borrow a form of Transcontinental Traffic Protocol where we break signals control the dispatcher's instructions.

The simplicity overview points across a few good ideas. Two basic ways that three of us who build railroads with realistic operation as most well as approach this goal. The ladies who enjoy watching work to focus on the maintenance of right car — what Bill calls macro operations. The ladies who like big-picture railroading what to focus on the maintenance of the trains these cars are blocked into — the macro here.

Either way — more or more or most models aspects of both — the point is to find ways to maximize enjoyment. As long as you're not wasting, while you're operating, you're doing fine. MR

Enthusiasts For Life

Plan, Build, and Improve Your Toy Train Layout!

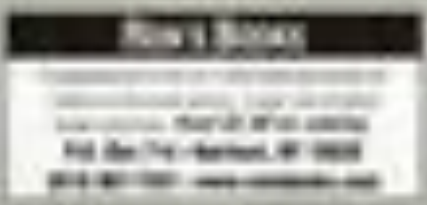
Kalmbach Books has the toy train layout resources that you need! Whether you are in the planning, building, or improvement stage, we've got you covered. And who better to learn from than the experts? Take your pick of these handy books and give yourself the information and knowhow that you need to create your ideal layout.

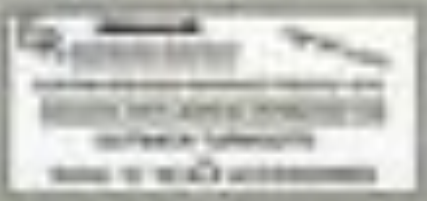
Buy now from hobby shops! To find a store near you, visit www.HobbyRetailer.com

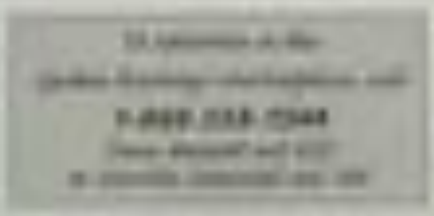
www.KalmbachStore.com or call 1-800-533-6644

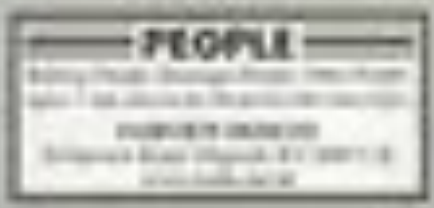
Monday – Friday, 8:30 a.m. – 4:30 p.m. CST. Outside the United States and Canada, call 262-796-8776, ext. 661.

Marketplace

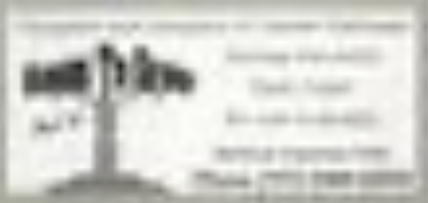


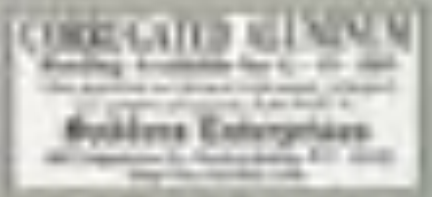





PEOPLE

PLANS



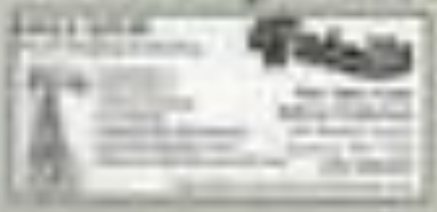


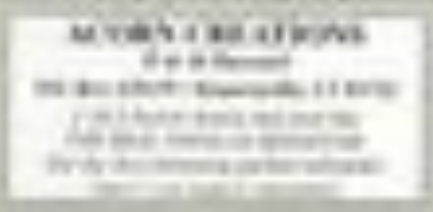
1/20 Scale SR•RL
Pulp Rack Cars
SR & RL Caboose #1514
with Full Interior
C.M. Models

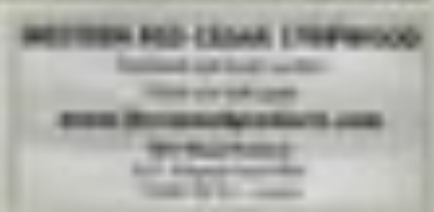
PEOPLE YOU KNOW
YOU NEED

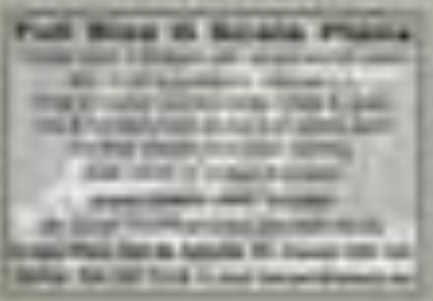
ROAD BED DESIGN
FOR YOUR LGB TRACK

Marketplace









EXPAND
your collection!

Access nearly 4,000 pages of modelling information in the new Model Railroader Special Issue and Archive Collection on DVD-ROM. You'll receive:

- 2 DVD-ROMs
- Issues of Great Model Railroads (1991 – 2011)
- Issues of Model Railroad Planning (1995 – 2011)
- Special interest issues including the series "Build a Realistic Layout" series (2005 – 2011)
- 3 modelling booklets from the 1990s and '00s
- 3,000+ archival stories by Lou Wierzbicki, Al Kalmbach, and Andy Anderson from Model Trains magazine
- PLUS, enjoy a bonus movie disk featuring fun hobby films from 1930 to 1957

$99.95
FREE SHIPPING

Discover your copy online at:

or call 1-800-533-6644
Monday – Friday, 8:30 a.m. – 4:30 p.m. CST
Outside the United States and Canada call 00-800-8765-4321

Classified Advertising

Schedule of Events

Place your classified ad today!
1-800-533-6644 ext.

Classifieds

The right words + the right audience = effective advertising

Call today to place your classified ad! 1-888-729-2164 x 1011

LEADING MUSIC RETAILERS

Run your Retail Directory ad in the next issue of **Model Railroader!**

Call 1-888-558-1544 ext. 815 for more information

Model Railroader

Get exclusive online benefits

Get the MOST from your Garden Railways magazine subscription. In addition to 6 issues a year delivered directly to your door, you get full access to our web-site and our exclusive subscriber-only features.

- Browse through **400 product reviews**
- Access **130 gardening tips** and **121 plant portraits** in the Railroad Gardening Library
- Download the latest **full-size drawings**
- Read articles about our **featured railroads**
- View our products in action

Available in Digital Format

Subscribe today at GardenRailways.com

or call 1-800-533-6644 Monday–Friday 8:30 a.m.–4:30 p.m. Central Time.
Outside the U.S. and Canada, call 262-796-8776, ext. 661

| End of the line

Running behind schedule!

by Roger Baker

Some are unavoidable, such as the Federation & Westcoast Railway's passenger timetable, which runs from Kamloops to Vancouver, a distance of 450 km, but takes 11 hours and 30 minutes. Or the Rocky Mountaineer, which takes two days to travel the same route. Then there's the Canadian, which takes three days to travel from Toronto to Vancouver, a distance of 4,466 km. Or the Ocean, which takes two days to travel from Montreal to Halifax, a distance of 1,355 km. Or the Skeena, which takes 16 hours to travel from Prince Rupert to Jasper, a distance of 724 km. Or the Hudson Bay, which takes 24 hours to travel from Winnipeg to Churchill, a distance of 1,697 km. Or the Polar Bear Express, which takes 6 hours to travel from Cochrane to Moosonee, a distance of 186 km. Or the Agawa Canyon Tour Train, which takes 4 hours to travel from Sault Ste. Marie to Agawa Canyon and back, a distance of 114 km. Or the Algoma Central, which takes 5 hours to travel from Sault Ste. Marie to Hearst, a distance of 297 km. Or the Ontario Northland, which takes 10 hours to travel from Toronto to North Bay, a distance of 392 km. Or the Polar Bear Express, which takes 6 hours to travel from Cochrane to Moosonee, a distance of 186 km. Or the Agawa Canyon Tour Train, which takes 4 hours to travel from Sault Ste. Marie to Agawa Canyon and back, a distance of 114 km. Or the Algoma Central, which takes 5 hours to travel from Sault Ste. Marie to Hearst, a distance of 297 km. Or the Ontario Northland, which takes 10 hours to travel from Toronto to North Bay, a distance of 392 km.

Once more, incredible sounds will excite your imagination.

There was a time when magical, new sounds captured your imagination and transported you to another world. Today, if railroading is in your blood, the authentic sounds of MRC decoders will once again evoke your imagination. Their pioneering technology, trackside recording techniques and true-life sounds will enrich your railroading experience

...and take you places you've never gone before.

There are other brands of NMRA compatible decoders, but none offer our combination of authentic sound and high tech capabilities...

- ✔ [illegible]
- ✔ [illegible]
- ✔ [illegible]
- ✔ [illegible]
- ✔ [illegible]
- ✔ [illegible]
- ✔ [illegible]
- ✔ [illegible]
- ✔ [illegible]
- ✔ [illegible]

MRC Decoders. They're For Real.

[illegible] www.modelrectifier.com

MRC MODEL RECTIFIER CORPORATION [illegible] www.modelrectifier.com

Today's Class 1 Railroads

. . . are constantly on the lookout for ways to move freight more efficiently. As a result, locomotive manufacturers continue to develop new technologies to include in their modern motive power offerings. General Electric is at the forefront of innovative development, offering technologies such as AC traction motors and satellite data transmission equipment.

Overland Models is excited to be on the forefront of these model technology by announcing this series of modern locomotives. Manufactured by Ajin Precision, each is factory painted and lettered for a number of modern locomotive owners. To add one to your collection, visit our website at www.overlandmodels.com and locate a dealer near you.

HO Scale

GE "AC44CW"
Canadian Pacific Diesel-Electric Unit #5257

CSX "C44ACM"
Heavy Haul Unit
CMR #6594-1

Also available in this series (not pictured):
Union Pacific "AC44CW" with cab/hi-vis step stripe and fog stack — CMR #6593-1
Norfolk Southern "C44-9W" with GE Keystone stripe — CMR #6595-1
CSX "C44AC" with cab/lo-vis step stripe — CMR #6596-1
BC Rail "C44-9W" — CMR #6597-1

Overland Models, Inc.